THE WRESTLE OF RELIGION WITH TRUTH

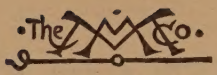
WIEMAN

25 &

Emerson W. Harris.

1930

THE WRESTLE OF RELIGION WITH TRUTH



THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO · DALLAS
ATLANTA · SAN FRANCISCO

MACMILLAN & CO., LIMITED
LONDON · BOMBAY · CALCUTTA
MELBOURNE

THE MACMILLAN CO. OF CANADA, LTD.
TORONTO

THE WRESTLE OF RELIGION WITH TRUTH

BY

HENRY NELSON WIEMAN

DIVINITY SCHOOL, UNIVERSITY OF CHICAGO

New York

THE MACMILLAN COMPANY

1929

All rights reserved

BL
48
.W48
1929

COPYRIGHT, 1927,
BY THE MACMILLAN COMPANY.

Set up and electrotyped.
Published September, 1927.
Reprinted January, 1928.
Reprinted March, 1929.

PRINTED IN THE UNITED STATES OF AMERICA
BY THE CORNWALL PRESS

PREFACE

Religion rightly understood and applied can open a way to goods of supreme value which cannot be found in any other way. Religion so conceived and used becomes a method. It is a method based upon certain presuppositions. This religious method can be successful with regularity, i.e. escape the reign of chance, only when its presuppositions are true. Insofar as its presuppositions are false its success will always be a matter of accident.

Religion is greatly in need of refining its method and establishing its presuppositions. There is too much accident here. It would seem that the majority of religious people never find the great good which some few have reached. Perhaps this is inevitable so far as people fail to understand the method or refuse to meet its requirements. But the method should be so formulated and the presuppositions so established that any earnest and faithful seeker may find that which the most fortunate have attained.

The present book is an attempt to describe those goods which must be sought and found by way of religion; to formulate the religious method by which they are attained; and to ascertain those true presuppositions upon which the method must be based if accident is to be banished from its successful operation.

We do not pretend to finality in our conclusions. On the contrary, while religion is as ancient as the race, this

particular line of investigation is not a common one. On our exploring ship we cannot say,

> We were the first that ever burst
> Into that silent sea.

Yet there have not been many explorers in these waters. Hence our conclusions must be subject to later explorations.

All that man may ever hope to attain depends upon intelligent adaptation to his environment. Human nature rightly adjusted to its total environment has tremendous possibilities. The problem is to make the right adjustment. We know very well how to make this adjustment to some things. Science, art, social organization and common sense provide the method. But some phases of environment upon which we are dependent for greatest good are mysterious, unimaginably subtle and complex, and work upon us in the most intimate manner through vital processes of mind and body. If we would get the greater goods of life we must not only make those adaptations achieved by way of science, art, social organization and common sense as generally understood. We must go further. We must adjust the secret impulses of the heart and the delicate sentiments of personality to that mysterious complexity of environment which exceeds the scope of every method save that of religion.

Religion is the way we seek adjustment to God. But what is God? God is this most subtle and intimate complexity of environmental nature which yields the greatest good when right adjustment is made. God may be much more than this, but at least he is this.

The kind of religion just indicated must be distinguished from an opposite kind. According to this opposite kind God will take care of me if I put my faith

in him no matter how I may ignore the processes of nature. Consequently I can be stupid without danger, if I am religious; and the more religious I am the more stupid I can be without loss of complacency. In some people this religion of stupidity is combined with great intelligence in selling real estate, getting votes, constructing machines and other such "worldly" matters. But this combination is possible only when a logic-tight partition is maintained between religion and the ordinary business of living.

This widespread cleavage between religion and intelligence, making the one a dear illusion, the other a rigorous adaptation to natural processes, is disastrous. It works like a deadly poison both upon intelligence and upon religion. It is one of the great evils of human life. Our present endeavor is to portray a form and method of religion which overleaps this cleavage and renders religion inclusive of all the initiative, discipline and insight which human nature can display.

Several of the following chapters have been published in various journals, Chapter II in *The New Republic,* Chapter III in *The Methodist Quarterly Review,* Chapters VI and VIII in *The Journal of Religion,* Chapter VII in *The Century Magazine,* Chapter XI in *The Hibbert Journal.* I wish to thank the editors of these journals for permission to use this material in the present book. My indebtedness to many is very great, but I must make special mention of the stimulus of certain discussions with Mr. Thomas Wright.

CONTENTS

PAGE

INTRODUCTION 1

PART ONE

METHOD OF RELIGION

CHAPTER

I. PRESENT STATE OF RELIGIOUS THOUGHT . . . 35
II. THE METHOD OF RELIGIOUS INQUIRY 54
III. WORSHIP AS MEANS TO SUCCESSFUL LIVING . . 68
IV. HABITS AND THE PERCEPTION OF GOD 83
V. HOW WE ARE REMADE 97
VI. HOW RELIGION CURES HUMAN ILL 109
VII. THE RELIGIOUS VISION 125

PART TWO

CONCEPTS OF RELIGION

VIII. THE NATURE OF RELIGION 135
IX. ULTIMATE CAUSE, SUPREME GOOD AND RELIGIOUS EXPERIENCE 148
X. ULTIMATE CAUSE, SUPREME GOOD AND RELIGIOUS EXPERIENCE (Continued) 160
XI. THE CONCEPT OF GOD 179
XII. SCIENTIFIC TEST OF THIS CONCEPT 191
XIII. RELIGIOUS TEST OF THIS CONCEPT 198
XIV. RELIGION AND TRUTH 213
XV. RELIGION AND PHILOSOPHY 234
INDEX 255

THE WRESTLE OF RELIGION WITH TRUTH

THE WRESTLE OF RELIGION WITH TRUTH

INTRODUCTION

I. Religion and Illusion

If religion has any peculiar way of salvation to offer it can be only because it brings to light certain facts of vital importance which would otherwise be ignored, or because it suggests better adaptation to facts. We believe that religion at its rare best does both of these and hence does offer a peculiar way of salvation; and that without it men are lost.

But for the most part religion has not done either of these two things. Most religion most of the time, both within Christendom and without, has blinded men to facts, has magnified illusion, and has hindered men from making adaptation to things as they are. We believe that nothing has so persistently and effectively blocked the way to salvation as religion, because nothing has done so much to confuse and darken the discernment of cold, hard facts. Next to religion, in this evil work, is art. And yet the concrete facts of most vital importance can never be discerned except by means of religion and art. Nothing can ruin human life so completely as that upon which it must depend for its greatest good. For this reason we pronounce religion the most horrible of all evils, and next to it art and science. But the hope of the race lies in religion. And art and science must be the indispensable collaborators of any saving religion.

Religion is cherished chiefly for the illusions it pro-

vides; and such religion is a deadly poison. When a man is in trouble he wants to think that things are not as they seem; and this religion of illusion provides him with a fairy realm where all is beautiful and happy. When he discerns the fact of his contemptible inferiority he wants to think that somehow, somewhere, by some supreme standard he is just as excellent as other men. He clings to the religion that enables him to cherish this illusion. When some method of procedure brings disaster because it is not adapted to the facts, it is easier to dream that God will bring all good things to pass in his wisdom and providence than to modify one's behavior in adaptation to the facts. Much popular religion consists of such a dream.

The popular way of depicting God runs something like this: We couldn't believe in a God who wasn't this and that. Then we proceed to portray God as an ideal being —ideal in the sense that he satisfies most completely the cherished dreams of the speaker. Manifestly this is mere myth-making. The actual God is a fact like a stone wall or a toothache. I can stand before a stone wall and say I refuse to believe in any stone wall unless it obediently opens up and lets me pass when I desire. But if I act on that belief I shall swiftly come to trouble. My dreams of what is most delightful and pleasing have no more to do with the making of God than they have to do with the making of the stone wall. The chances are that God in fact is very far from pleasing. There is too much in me of evil to find God very pleasing; I am not sufficiently divine myself. I may refuse to believe in such an unpleasing God; but God and the stone wall stand just the same.

The religion of illusion, this religion of sugar and spice and all things nice, must be fought as we fight the White Plague and the Black Death. It may serve to draw peo-

ple into the church as the ice-cream counter draws them into the drug store. But they will not stay to get the truth any more than the consumer of a "Lovers' Delight" will stay to buy castor oil. Insofar as the writer engages in any fight at all it is not against either fundamentalism or modernism as such, but it is against all religion of illusion wherever it may be found.

There is such a thing as a religion which seeks for fact at all costs. It cultivates doubt in order that beliefs may be questioned and corrected and thus the facts more clearly discerned. It does not doubt that there is fact. No one can doubt that. But everyone can and should doubt that we know precisely and completely what the fact is. It insists that facts are far more important than any cherished mistaken beliefs, no matter how unpleasant the facts and how delightful the beliefs. It insists that this is not a nice world and God is not a nice God. God is too awful and terrible, too destructive to our foolish little plans, to be nice. But God is a fact and this world is made up of facts; and if we are ever to live securely and magnificently in this world (or any other) it can only be through adaptation to these facts.

II. The Method of Religion

Religion is man's endeavor to adapt himself to the facts of existence. It differs from other such endeavors in that it seeks adaptation of the whole of life to ultimate facts. Professor Whitehead has made two very significant statements on this point. He has said: "Religion is the art and the theory of the internal life of man, so far as it depends on the man himself and on what is permanent in the nature of things. . . . It is the transition from God the void to God the enemy, and from God the enemy to God the companion." [1] If we may be permitted to translate

[1] A. N. Whitehead, *Religion in the Making*, 16.

these two statements into our own thought we find them most illuminating of the method of religion.

As a person goes about he undergoes first this experience and then that, here something joyous, there something sad; one view of things comes to him here, another and different view possesses him there. Here someone he loves treats him cruelly and causes him bitter pain; there new friendship springs up, here an old hope dies and leaves an aching void. These diverse, confused and conflicting experiences constitute his reactions to many different situations. But all these conflicting reactions cannot dwell together peacefully in a single personality. And all these diverse situations, thus treated, cannot be put together into a total situation to which one can adapt his life.

One must pull himself together. These conflicting and confused reactions must be brought into some kind of unity. One must find some way of fitting these diverse situations together into a world to which it is possible to adapt oneself. One must get the hang of things. One must find some way of getting along. We do not refer primarily to the need of getting an intellectual grasp of things or to achieving a unified philosophic view. We refer to something much deeper. It is often more emotional than it is intellectual. It is the problem of how to organize one's reactions in such a way as to live without internal anguish or external disaster.

Anyone with a fair degree of sensitivity, anyone who has not become so callous and mechanical that he no longer feels the slings and darts of outrageous fortune and the seemingly impossible, because conflicting, demands which life makes upon him, any such person must occasionally feel the need of practicing "the art and theory of the internal life of man." That is to say, he feels the need of organizing his responses in such a way as to carry

on. But to do that he must be able to detect some character underlying these diverse situations and conflicting demands and through adapting himself to it find some way of dealing with what is otherwise a baffling confusion.

When a man first experiences this sense of need, this sense of being wounded and buffeted in spirit, this sense of maladaptation and futility, God is the "void," to use Whitehead's phrase. He has not found that underlying character of events to which he can make adaptation and so achieve mastery. Some people, of course, may never experience this sense of need and of void, either because they live like the animals on so superficial a plane, or because they are so stupid and insensitive that they are quite blithely unaware of the maladaptations which characterize their conduct. They never detect the outrageous blunders they make and so have no sense of need. Others bear old wounds that never heal because they have not found the method of religion which cures such ill. Others go crazed and tortured to their graves, like Edgar Allan Poe.

The second stage, again to use Whitehead's phrase, is to find God the "enemy." When one begins to discover that underlying character, that hang of things, that deeper fact, to which he must adapt himself and in relation to which he must organize all his experiences, he must subject himself to discipline. It is more pleasant to dream than to adapt oneself to facts. At this initial stage facts appear like enemies. Here is the point where the ways part in matters of religion. Here is where some break away and cling to their illusions rather than face the facts. To those who cherish the religion of illusion, God is never the enemy; but to those who identify God with the ultimate factual character of events to which adaptation must be made, God may well appear as the enemy. He is that ultimate fact with

which human life must struggle and to which it must adapt itself if it is to survive and flourish. He is that ultimate character of events with which the prophets have all struggled until they have found how to adapt themselves to it.

This brings us to the third stage, God the "companion." When a man has achieved the required adaptation to the ultimately determining character of events, this fact becomes the source of mastery and joy. He has solved the problem of how to live. He has discovered how to organize his reactions in such a way as to catch the lifting power of this determining character which underlies the events of life. The character of God now becomes a source of unfailing strength, a friend and companion. It gives him assurance for the future and mastery for the present. He has learned how to make adaptation to the most important and permanent facts. Other facts can be treated as they arise or even ignored if need be. One can let the waves crash over him if he has caught the drift of the ocean current.

This method of religion is like the method found in any problem-solving. There is first the sense of need and the void, because the essential facts have not been discovered. Then there is the discovery of these facts and the consequent necessity of casting away one's illusions, giving up what has been mistakenly prized as precious and accepting what may have been mistakenly esteemed as hateful. Finally there is the achieved reconstruction of habits and valuations in adaptation to these facts.

Religion differs from other problem-solving in that it has to do with the ultimate character of events, rather than with the more superficial facts which engage the mind in other walks of life; and it requires the organization of all one's experiences, the reconstruction of

that totality of reactions, which makes up the whole personality, rather than some department of the personality.

It should be made very plain that the exact sciences are quite helpless when it comes to these more complex and profound problems of human adjustment. He who depends upon the sciences, taken severally or collectively, to guide him in the conduct of his life is suffering from a very sad illusion. What science will enable me to catch the deep meaning and the need of my friend as he stands there inarticulate and miserable, hoping against hope that I shall understand him and make the required adaptation? Friends do sometimes understand one another in such moments, but it is not science which informs them. We call it insight. As a matter of fact it is that ability to discern the subtle and complex needs of a human personality because of much association with humankind and with that personality in particular. But such association can give one insight only when one has constantly made experimental adjustments to others with constant sensitive observation to detect the consequences of his adjustments, and thus has gradually acquired the ability to "read human personality." But this is only one example of those many complex and profound problems of human living wherein science is of no avail. Religion is the name we give to problem-solving when it undertakes these most profound and complex problems of human life, not merely as intellectual problems (that is philosophy), but as vital problems in which the experiments by which solution is sought are experiments in living and the solution is a way of life that is actually lived.

III. Beliefs vs. Concepts

There is one distinction of exceeding great importance which underlies our whole treatment of religion. This

distinction must be made plain at the very start. It is distinction between the formal concepts of religion and the actual content of religious belief.

The best example of formal concepts apart from any content of belief is found in pure mathematics. Take for example the proposition seven plus five equals twelve. If we put seven apples in the sack and then add five more and reach the conclusion that there are twelve in the sack, we shall have a verifiable belief. Such a belief is knowledge about the world of events. But if we merely consider the proposition that seven plus five equals twelve without regard to apples or carrots or bean poles or anything else, we are dealing with the formal concept alone. Seven plus five equals twelve is not a belief about anything that exists in the world. It is only an abstract concept. But seven apples plus five apples may well be a belief about a particular group of apples.

Democracy is an abstract concept. It is not so clear, not so free from ambiguity, not so good a tool, as the concept of seven plus five. But it is a concept. We can use it to formulate beliefs and achieve knowledge about the United States. We may believe that the United States is a democracy or ought to be one, or that it aspires to be one. We may believe that a democratic society is good or bad; that some movement or other will promote democracy. But we can formulate and hold these beliefs, we can make these judgments, solve these problems and test these theories only when we have the abstract concept of democracy to work with. And the accuracy of our knowledge, the adequacy of our evidence, the skill with which we solve our social problems and attain helpful beliefs, will depend on the clarity, consistency and developed implications of our concept of democracy and allied concepts.

Now it is quite possible to separate these abstract concepts and study them apart from the beliefs, the knowledge and the problems with which they are associated in practical life. In fact it is necessary to study them in this way in order to clarify them, free them from ambiguity and inconsistency, and develop their implications. We must do this if we are to have social concepts adequate to solve our social problems and conduct with skill the course of society. We can never define the concept of democracy with that completeness and accuracy that we require, we can never develop its implications and free it from inconsistency with our other concepts, if we do not thus study it in the abstract and treat it in this formal way. If we are to have a spade sharp and fit to dig our ditch with least labor and suffering we must occasionally take it out of the dirt and away from the digging in order to sharpen and improve it. The same is true of the concepts which we use in everyday life.

The same is true of the concepts involved in religious belief and the conduct of the religious way of life. We cannot formulate and develop religious beliefs without concepts. We cannot solve the problem of human living by the method of religion without concepts. But if we are to have religious concepts that serve us well in these ways we must occasionally make a study of them apart from religious belief and apart from the religious conduct of life. Religion will always be in a confused, chaotic, blundering state until its concepts are clarified and rendered consistent, and their implications developed. But such clarified, consistent and developed concepts will never be attained for religion until we learn to distinguish between the concepts and the religious beliefs and practices in which they are found and treat these concepts apart from the beliefs and practices.

The work of distinguishing religious concepts from the

beliefs in which they are involved, and the work of clarifying these concepts and developing their implications, still await the doing. The physical sciences are most advanced in this respect; the social sciences lag behind; but no human interest is so backward as religion in this matter. Most religious people know what you mean when you speak of seven plus five without specifying fingers, pebbles or bean poles. But there are primitive peoples that cannot think in such abstract terms. They know what you mean when you speak of five fingers, five stones, five trees, but to speak merely of five——, five what? five nothing, just five—that is incomprehensible. There are many religious people who are precisely in that state when it comes to religious matters. They know what this or that religious belief is, but they cannot grasp an abstract concept used in religion without immediately attaching it to some particular religious belief.

IV. Philosophy of Religion

This work of studying concepts in the abstract, defining them more accurately, rendering them more consistent and tracing their implications is preëminently the service of philosophy. Philosophy makes a study of the concepts which enter into politics and other phases of social life with a view to improving the concepts there found. It does the same for art and love and all the sciences. It does the same for the concepts that are used in home life and marriage and in moral conduct. Philosophy does not practice experimentation. It does not apply the concepts to concrete things in such a way as to develop and correct and test beliefs and achieve experimental knowledge and solve practical problems directly. But it treats these concepts in the abstract with a view to making them more fit for experimental

application and for all the other uses to which concepts are put in the exact sciences, in the practical conduct of life, in art, in love, in dreaming, in moral living and in religion.

Here, then, we have the province and nature of the philosophy of religion. It is the examination of the concepts which are employed in that way of life called religion with a view to rendering them more clear, more consistent and more fully developed with respect to their implications. Our present undertaking is a work in the philosophy of religion. It is a study of the concepts that enter into religion and of the method by which they are there employed.

It is important to distinguish between theology and philosophy of religion. Theology is a study of religious beliefs, while philosophy of religion is a study only of the concepts which enter into those beliefs. To speak in parables, theology ascertains whether people believe there are twelve stones or twelve potatoes or twelve apples in the sack. But philosophy of religion makes a study of the concept of the number twelve, without regard to whether the number refers to apples or potatoes. Theology examines, criticizes, evaluates and endeavors to organize and correct the beliefs which enter into the religious way of life. But back of theology stands philosophy of religion. It is concerned with the formal concepts that enter into these beliefs. The formal concepts constitute one indispensable factor in religious belief; religious belief constitutes one indispensable factor in religious living. Theology is once removed from that way of life called religion. Philosophy of religion is twice removed from it.

But in saying that philosophy of religion is twice removed from the concrete process of religious living. we do not mean to imply that it is of little importance

to the religious life. On the contrary there is nothing so important for the conduct of human living as the formal concepts that enter into it. To conduct any department of life with confused, ambiguous and undeveloped concepts is to blunder miserably and be restricted to narrow bounds of endeavor.

Here again the case of number will show the tremendous importance of clarifying and developing the formal concepts. Men had beliefs about numbered things for thousands of years before they began to study and develop the formal concept of number apart from the content of belief. As long as they failed to develop the formal concept their ability to count and otherwise compute was greatly restricted. Their only method of computation was to match objects with their fingers or with collections of pebbles, or with beads as on the abacus. They devised methods by which pebbles or beads could be grouped and these groups put into larger groups, and thus with great labor and cumbersome manipulation they could deal with fairly large numbers. But the whole subsequent development of civilization would have been impossible had men not discovered at last that they could deal with the abstract concept of number apart from beliefs about things. If they had not developed the abstract concept of number they could never have made computations in that unlimited and varied and free manner required for the exact sciences, the applied arts of civilized life and our complex social organization.

Our political and social life to-day suffers horribly from lack of an adequate system of formal concepts which would enable us to ascertain the facts, develop beliefs more nearly correct and solve our problem more satisfactorily. But nowhere do we find such devastating confusion, such crude limitation, such hopeless futility,

arising out of lack of an adequate treatment of the formal concepts involved, as in religion. Here is the most loudly crying need of our times. Here is where the work of philosophy is most urgently needed to clear away ambiguity in the concepts which enter into religious belief, to define these concepts more precisely, to develop their implications and reduce them to consistency. Such a task will never be accomplished by one man alone, much less by one book alone. It will not even be completed by a whole generation of philosophers. But it must be undertaken by individuals, however small may be the contribution of each.

No doubt in ancient days of barbarism many a hard-headed practical man looked with scorn upon any attempt to study the abstract formal concepts of mathematics. What did such a study have to contribute to the organization of a fighting horde or the provision of pasture for the cattle? Nothing at all, so it doubtless seemed to him; and indeed the immediate results might well appear negligible. But we know now that the study of the abstract concept of number has had everything to do with all the vital processes. So likewise to-day, when religion is often as barbaric as was the industry and social organization of the hordes of Ghengis Khan, many a hard-headed leader of religion may look contemptuously upon our attempt to treat the formal concepts of religion. How will such a study help to build up the church or save men from sin? We can only say that, if the formal concepts entering into religion can be sufficiently clarified and developed, the result will be as helpful to religion as mathematics has been to the organization of society and the provision of food for cattle.

Let us try to illustrate this distinction between formal concept and content of belief by applying it to the idea

of God. It happens that just now the most popular belief about God among the churches of Christendom is the thought of him as someone who will take care of you, help to keep you out of trouble and get you out of trouble when you fall into it. There are many people who cannot distinguish between such a belief about God and the formal concept that enters into the belief. It is as though one persisted in thinking that seven plus five must always mean seven apples and five apples. But we need to go back no farther than the Puritan to find the idea of a God who gets the great majority of people into infinite trouble, if hell can be called trouble. He predestined men to sin and hell fire for his own glory. We are not claiming that the Puritan's idea of God was correct. On the contrary we are saying that both the Puritan idea and the modern idea involve two things, the formal concept and the content of belief. The formal concept is the same in both, but the content of belief is different.

Let us try to state the formal concept of God as distinguished from particular beliefs. Very briefly, God is that feature of our total environment which most vitally affects the continuance and welfare of human life. More specifically, God is that character of events to which man must adjust himself in order to attain the greatest goods and avoid the greatest ills. Such a statement is purely formal. It does not tell what God may be. It only indicates the region in which he is to be sought and may be suggestive of the method by which to correct and develop the content of our belief about God.

Some may assume that we are claiming that this most important character of events is the legislator of Calvin's institutes, or a benevolent *pater familias*. The person who does that is still identifying the abstract concept

with some particular belief about God. But in our definition we are only asserting that the word God is a term which properly applies to this character of the total world event. If God is an old man with big whiskers, it is not the whiskers which make him God, but the fact that he gives a certain character to events and the fact that this character most vitally affects our lives for good or ill. Possibly we have not correctly formulated the abstract concept of God; but our attempt may serve to illustrate the difference between concept and belief.

Men have cherished innumerable beliefs about God. Just now we are not saying which of these beliefs, if any, is true. We are only trying to indicate what they are *about*. They are about that character of the world event which bears most critically upon human fortune. These beliefs may all have been mistaken or they may have involved all degrees of truth and error. But if they were mistaken it was because they aimed at a truth and missed it. The truth they missed, or the truth they found in part only, was the truth about this character of the world event, by virtue of which it provides the greatest goods we can ever attain and delivers from the greatest ills, when we get into right adjustment with it.

We believe metaphysical knowledge is quite within the bounds of human attainment, providing one does not mean by metaphysical the transcendental. But all such knowledge must be attained through the experimental operations of concrete human living. Philosophy may illuminate this knowledge by bringing forth into clear light the concepts that are involved in the beliefs by which we conduct this process of experimental living, and by developing the implications of these concepts. Such work is legitimate metaphysics. But the experi-

mental process, by which belief is verified, lies outside the province of philosophy. We believe it is religion and religion only which can conduct those radical experiments in human living by which we probe most deeply into the profundities of this world's existence and thus seek verification of our metaphysical beliefs. Philosophy cannot attain to such metaphysical knowledge without the help of religion; but neither can religion attain it without the help of philosophy. Philosophy charifies the concepts which are indispensable to the attainment of such knowledge; but religion conducts the experimental process of human living which is likewise indispensable. It is religion which must dive into the depths to bring forth what may be hidden there. It is the work of philosophy to perfect the equipment which enables the diver in deep seas to do his work. Religion to-day is sadly in need of improved equipment in the form of better concepts. In fact its equipment in many cases is so antiquated that it can send up from the depths nothing but blub-blub.

V. True Belief

There is no product or achievement of human life more precious than religious belief insofar as it contains some measure of truth. Let us glance for a moment at the nature of true belief or, as it is commonly called, truth. But the word truth is ambiguous. It has many different meanings. We may escape some of this ambiguity by limiting truth for the present to true belief. This might be called experimental truth as distinguished from other ideas of truth. By experimental truth we mean a belief that has been experimentally tested until sufficient evidence has been gathered to justify one's accepting it as true. Of course one may be mistaken. One may think the evidence justifies such acceptance

when it does not. One may hold a belief to be true when it is not.

There is no way to guarantee the human mind against error. There is no way to make it infallible. Yet there are some beliefs for which evidence is so overwhelming that an intelligent person can scarcely doubt them. One of these beliefs is the statement we have just made, namely, that the human mind is fallible. Yet many people in the face of this overwhelming evidence, and seemingly without any justification, have insisted that there is some source of infallible truth. Three great means of infallibly reaching truth have been set up by different people at different times. One of these has been religious authority, the other philosophy, often called "reason." The third and latest to assume this rôle of infallible source of truth is science.

The religious device for guaranteeing the human mind against error—going to the Bible, depending on the authority of the Pope, or appealing to some medicine man or incantation—is rapidly falling into disrepute. It scarcely needs discussion here. The philosophical device is criticized later on in this book.[2] But to-day it is science that is rapidly becoming the bulwark of this ancient superstition. Science is considered by an increasing number as the custodian and dispenser of truth. Frequently one meets the statement, not only in the mouths of the vulgar, but in books written by highly cultured and otherwise intelligent people, that truth must be left to science. Strange how persistent are these ancient superstitions! Root them up in one place and immediately they spring up elsewhere.

Science consists in devising instruments—the microscope, telescope and spectroscope being among the most simple—with which to make certain minute observa-

[2] See Chapter XV.

tions. But the observations are not truly scientific and exact until two things are done. First, they must be correlated with some scale of measurement and registered on that scale by means of mathematical symbols. Second, the conditions under which the observation was made must be stated, which means that the mechanical devices used to control these conditions, in other words the total mechanical equipment used to make the observation, must be described. In physics and chemistry this is very plain. In biology, psychology, sociology and other such sciences the mechanical nature of the observation is not so prominent, but these latter "sciences" succeed in becoming strictly scientific only insofar as they also are able to devise equipment which renders their observations mechanically precise and mathematically measurable.

Science, then, reduces to this: Recording on some dial, plate, graph or other measure the workings of a mechanical calculator designed to measure in some respect a selected series of natural events. Added to this, of course, are all the inferences which are drawn from the way the machine works. But these inferences are beliefs which may be mistaken—often are—and are supported by satisfactory scientific evidence only as they find it in the further working of the same machine or other machines.

Strict science, then, is belief about the working of machines. Whenever it tries to rise beyond the working of machines it enters the realm of reflective thinking, which is not strictly scientific, except as all inference based on experimentation, including the religious, can be called scientific. But if we take "scientific" in this last sense it becomes broad enough to include all the legitimate claims of religion. Since science in the strict and narrow sense is belief about the working of ma-

chines it provides knowledge for the construction of machines. These new machines give rise to further justified beliefs about machines, which again lead on to the construction of still further machines. These machines in great part have been turned to the service of man, and their tremendous achievements have dazzled the modern mind. Wonder at these achievements is producing much the same effect upon the modern mind that wonder over the ancient medicine man produced in the primitive tribe. Indeed it has revived the ancient superstition about the infallibility of some sources of knowledge.

In the face of this myth about the supreme authority of science on all matters of true belief let us make certain observations. It is important to note that many other guiding beliefs are needed for the conduct of human life besides beliefs concerning the working of machines. No doubt machines are very valuable and serve us in many ways; but they are merely instruments. They do not inform us concerning what goods we shall seek by means of them or what goods are worth seeking. Increasing the mechanical efficiency of my automobile does not in any way enlighten me concerning where I should travel by means of it. When in doubt concerning where I shall go I might turn to a study of the mechanical workings of my motor. I should come away from such study no whit wiser concerning what journeys are most worth while. To be sure, my study of the motor may change my interests so that I now decide to visit an automobile plant rather than my friend in the country, which I would have done had I decided the matter before becoming absorbed in motors. But this effect upon my interests is not enlightenment concerning what is most worth while in life. It is merely a transformation of my own nature by reason of contact with machinery.

What we have just stated is a parable concerning the place of science in modern life. It consists of the construction of machines and beliefs concerning how machines work. It cannot, therefore, give us true beliefs, nor provide experimental tests of our beliefs, concerning many precious things in regard to which we need enlightenment. What it does do, however, is greatly to modify our valuations concerning what is most precious, not by enlightening us, but by changing us in respect to what is capable of engaging our interest. Whether this change is for the good or the bad, or good in some respects and bad in others, is a matter which must be determined by forming beliefs and testing them experimentally. But these beliefs which are able to enlighten us concerning the value of this effect of science and machinery upon our lives, and concerning what goods we had best seek by means of these machines, these guiding and supremely important beliefs, cannot be found through science in the narrow sense. Those beliefs which must be tested by experimental processes which exceed the bounds of the exact sciences are the most important. Our attainment of the greatest goods, and our avoidance of the greatest ills, depend on whether we can achieve true belief concerning these matters which lie beyond the scope of exact science.[3]

[3] C. E. Ayres has written very suggestively on this point. All science, he says, consists in observing, and making inferences from, the workings of some "machine devised to record in successive, equal, conventionally numbered units the increase or decrease of any volume, length, width or degree of any kind. Whenever and wherever a happening can be trained through a machine, and that machine converged upon a dial, and that dial marked off into standard units, and those units numbered; then and there an exact, scientific, mathematical observation has been made possible. . . . Reports of scientific investigation consist very largely of descriptions of the machinery used, how it was used, and what happened when it was used. Theories and interpreta-

Truth in respect to these most important beliefs must be sought also by way of the experimental method; but it is the experimental method of religion, not of science. Let us endeavor to define experimental truth, whether found by way of experimental religion, experimental science or any other form of experimentation. Let us define it by gradually drawing our circle narrower and narrower until we have included truth only and excluded all else. First of all let us begin with experience. Experience is not truth necessarily, for truth involves concepts. Experience without concepts cannot be truth.

Experience with concepts is still much too big a circle to be identified with truth. Some concepts constitute error. Still other concepts are neither true nor false. They may enter experience, they may be used to construct works of imagination, without being either true or false. The concept of winged horses is an example. Of course if one claims that winged horses range the plains of Mongolia, the concept is false. But merely to

---

tions follow, but never stand alone. If they were published alone, no other scientist would credit them. . . . What scientists mean when they boast that all scientific research can be repeated is precisely this point, that the real achievement is the invention of the instrument. Any one can take the readings. . . . Thus facts upon which science rests turn out to be machines. In the beginning is a machine—say, for example, the famous oil drop machine in which minute particles of oil of measurable size are sprayed into a vacuum and certain 'rays' are allowed to enter. This machine is most artfully designed to permit microscopic observation of the movements of the drops of oil, and calibrated measurement of those movements, with readings in numbers of units. . . . The electron theory is a very ingenuous 'explanation' of it all, and is certainly true to this extent, that reasoning upon it as a basis, various additional happenings have been provoked which thus far 'fit' the theory. What is most interesting, however, is that the machines are paramount. . . . Science, we say, elimintaes the personal equation. It does so by substituting the mechanical equation." (*Science, The False Messiah,* pp. 46-54.)

have the concept of a winged horse is neither true nor false.

Truth, then, consists of concepts put into the form of beliefs that can be verified by way of experimental operations. The experimental verification does not make them true. They may be true before they have been verified. But it is only with respect to experimental operations that they are true. To be true implies some claim concerning the consequences of experimentation, whether or not the experimentation is ever carried out. It is only with reference to some experimental operation, past, present or future, actual or possible, that a belief can be true. Merely to think a concept does not make it either true or false. It is only when some claim is made for that concept that it becomes constitutive of truth or error. And the claim must always be some claim concerning the results of experimental operation with the concept put into the form of a belief. If one says there are winged horses in Mongolia he is claiming that if one went there, or could go there, he would see or hear or somehow detect by some possible method of observation that such horses were there.

All observation comes under the head of experimentation. Looking intelligently at an object, as distinguished from the merely habitual organic reaction of attentiveness, is an experimental operation inasmuch as one thereby sustains or disproves by the ensuing experience some idea of what the object under consideration may be. The ensuing experience is the consequence which fulfills or refutes or modifies the belief that certain consequences will follow when the experimental operation of continued looking is performed. These consequences may consist merely of certain continued images upon the retina of the eye. Even glancing at an object may be an experimental operation. Of course there is a great amount

of organic attentiveness which is not experimental at all inasmuch as no conceptual belief is involved. Presumably lower animals and humans in many cases perceive in this way, the stimulus induced by attentiveness causing appropriate organic reactions, but without leading on to the formulation of a belief to be tested by ensuing experience.

One of the most important and difficult steps in the quest for truth is to formulate beliefs which can be experimentally tested, however indirectly. This holds of beliefs pertaining to God as much as of any others. But many beliefs never can be experimentally tested, no matter how far one develops the implications of the concepts involved and no matter how one may transform existing conditions in the endeavor to devise an experiment. If such a belief is held as true, i.e. held with the claim that it will some time or other yield certain consequences when experimentally applied, the concept is false because the claim is false, since no experimental application is possible. All beliefs which are of such a nature as to render their experimental application impossible cannot validly make the claim that they will yield certain results when experimentally applied. Concepts may be cherished without any such claim and hence without regard to truth or error. Such, for example, is the concept of Santa Claus. But if such a concept is held in the belief that it can be experimentally applied under certain possible conditions (and that is the way many a small child holds it), it becomes false. Other concepts may be capable of experimental application, but only after their implications have been developed beyond what has yet been accomplished, or only after experimental conditions have been devised different from anything yet done. Sometimes it takes generations to develop the right implications or devise

the right conditions for experimentation. Such, for example, is the claim that democracy is the best kind of government. That claim may be true, but it has not yet been completely verified.

What, then, is truth? Truth consists of those concepts which (1) involve the claim that certain consequences will result when they are experimentally applied in the form of theories or beliefs, and (2) those concepts which do yield these consequences when experimentally applied under the right conditions and with the right implications. The two points just mentioned are really one. A concept is not completely constitutive of truth unless it not only involves the claim that certain consequences will result when it is experimentally applied, but also specifies either explicitly or by implication precisely what are those existential conditions under which it will yield the consequences claimed.

VI. Teaching Religion

When the method and basic concepts of religion are clearly defined and widely recognized, and people learn to distinguish between concepts and beliefs, religion can be taught in the schools. Does that mean that the time will come when school instruction will make people religious or induce them to live in the way called religion? Not at all. School instruction can never make people religious any more than it can make a man a good citizen or a doctor or an engineer or banker. All that school instruction can ever do is to impart the basic concepts and the method. That is all it can do in engineering or medicine or banking. No one ever becomes an engineer or a doctor by studying books and learning what the classroom has to teach. One becomes an engineer or doctor only by practice. One must use the concepts and the method taught in the schools to guide

him in his attempts to live in a certain way or do a certain thing. If one is persistent and has some natural aptitude he may become a good doctor or engineer through such experimental efforts. But the school instruction alone can never make him a citizen or an engineer. So likewise we shall never be able to teach religion except in the sense of instructing the rising generation concerning the method and concepts which are required for that kind of life, just as we instruct them concerning the methods and concepts required in citizenship, in engineering, banking, etc.

But religious instruction in the public schools is not feasible even in this limited sense until the concepts and methods which are most useful in religion have been clearly distinguished from particular religious beliefs and practices, as seven plus five is distinguished from seven sticks plus five sticks. We may never attain sufficient unanimity in religious belief to put these beliefs into the curriculum of the public schools, supposing that were ever desirable. But it is quite conceivable that sufficient unanimity can be attained concerning the abstract concepts and method of religion when people have learned to distinguish between them and their beliefs and religious living.

The transmission of religion requires more than instruction in the abstract concepts and method. We have already made that plain. It is equally true of engineering and banking. This something more may be brought loosely under the head of inspiration. So far as concerns religion the work of inspiration properly belongs to the churches, not the schools. It includes that arousal of response that comes from presenting a specific content of belief. Above all it comes from social contagion through association with people who are conducting religious lives themselves. It includes firing the

imagination with statement of goods to be attained and evils to be avoided by following this way of life. It is the "spirit" that is imparted by the minister and the worshiping group. This must be added to instruction concerning concepts and method if one is to become religious. Something of similar sort must be added if one is to become a good citizen or engineer or scientist. But instruction without inspiration, and inspiration without instruction, are both failures.

Religion is one of the very few vital interests of mankind excluded from public education in United States. This state of affairs cannot be maintained indefinitely. Either religion will continue to decline in its intellectual standing and become ever more weak and degenerate and ever more isolated from the rest of life, or else some method will be devised to put it also into the curriculum. But there are many who oppose any attempt to do such a thing at the present time. Religion has not yet attained the form which makes it possible to incorporate it into the body of public instruction. Hence the urgency of the task, in which many are engaged, of clarifying and developing the essential method and concepts of religion. Our present undertaking is an attempt to coöperate in this task.

If someone should ask us to state what is that method of religion and those religious concepts which are suitable for public instruction in the elementary schools of United States, we should be unable to point to them. That is precisely the point we are trying to make. We do not have them as yet. But we cherish the hope that in the course of time they may be developed. If they are not developed religion will go from bad to worse. As more and more of the interests of life are taken over by the schools, and the schools absorb the mind of the child to an ever greater degree, it will become increasingly dif-

ficult to make the child feel the importance of that which is excluded from the schools.

Another great evil inevitably results from this continued exclusion of religion from public instruction. It has already appeared to a degree. When religion is not subjected to the treatment which the rest of our culture receives when passed through the public school system it becomes estranged from this body of culture. It becomes a thing apart, peculiar and quaint, a world by itself. All the fine arts and practical arts expounded by the teacher, studied by the pupil and discussed in the classroom are assimilated into the thought and feeling of modern life by this process. They are reformulated and transmuted into the breath of life which sustains the modern world. They are given a distinctive imprint and character by the school system. If religion is not given this imprint and character it becomes something foreign. It becomes more and more divergent from the culture of our time. A breach widens between it and the rest of life. The mind of the child is shaped by the culture of the public schools. This shaping is going to become more and more pronounced. The child mind so shaped will find religion, when not so shaped, an alien and forbidding thing. Thus the tragic gulf will ever widen between religion and the modern world.

No matter how efficient the Sunday school may become—and we seriously doubt it can ever become as efficient as the public school—and no matter how extensively we develop the week-day church school, this breach cannot be healed. On the contrary it will be aggravated. The very fact that religion is taught in a totally separate and different school from the rest of our culture will widen the gulf. Under such a method of instruction the child will never be able to unite religion with the rest of his life. The estrangement between re-

ligion and the modern world which prevails to-day is due in no small part to this very exclusion of religion from public instruction. Students that enter graduate schools of religion, such as theological seminaries, show a woeful lack of thought and instruction in matters of religion as compared to their knowledge and thinking in other branches of human culture. Theological seminaries must start with their students on matters of religion about where the upper grades of the grammar schools commence in history and the social sciences.

But the cure is not so simple as some seem to think. This evil state cannot be cured simply by legislating religion into the schools. Religion in its present form cannot be taught in the schools. To try to compel the public schools to undertake it through legislation would simply make confusion worse confounded. Religion cannot be taught until the universal method and concepts of religion have been ascertained, developed, clearly formulated, simplified, popularized and put in such form that each individual can take them and develop his own personal religion by means of them.

We can scarcely hope for unanimity in religious belief; but we may well approximate unanimity with respect to method and abstract concepts in religion. And these alone can constitute the body of instruction in the public schools when we at last shall have brought them to light and made them widely recognized.

VII. Personal Religion

After a person has been socially inspired to religion and after he has acquired the necessary method and concepts, there is something further to be done. This something further, however, rests with the individual. No one can help him. Yet if he does not undertake this further solitary work he has not fully entered into religion

at all. He has merely come to the threshold. Society, his church, his pastor, the school and all instruction have done all they can for him. All these together cannot give him religion if he will not take it.

And what is this something further? It is a solitary matter. It consists in developing his concepts into beliefs under the inspiration of his church or other associations, and applying these beliefs experimentally, according to the method he has learned, to the end of organizing his life in such a way as to establish the most helpful personal adjustment to God. This personal religion is the process of forming habits adapted to that character of events which most potently determines his greatest good. Religion must become personal in this way else it is not fully religion at all. It must become solitary, incommunicable, uniquely individual, the most precious thing about the individual. But the abstract concepts he uses to develop such personal religion should be communicable; and so also should be his method.

When we understand that this is the way religion must work we shall be prepared for great individual differences in religious belief. We shall be prepared to see our children go their lonely way in worship and say to us, "Woman, what have I to do with thee?" Out into the vastness and the mystery of all being they must grope their way until the shadows hide their spirits from us, although their bodies are with us daily. In this sense each person must be alone when he stands before God. Let no evangelist or "church worker" dare disturb this sacred solitude of the individual with his God. The church and the pastor should inspire the individual to undertake such lonely intercourse with God; but no church and no official and no school teacher and no parent should ever come between the individual and his God. Each must make that adjustment to God which

his own unique individuality requires. One is scarcely ready to undertake the development of such personal religion, however, until he has reached adolescence or later.

As long as the method and concepts of religion are not freed from the socially accepted religious practices and beliefs, the individual cannot take this method and these concepts to work out personal practices and beliefs for himself. He can only accept or reject the traditional practices and beliefs of society. In primitive societies such is the case not only with respect to religion, but with respect to love, the fine arts and all the practical arts such as agriculture, diet, etc. But gradually one human interest after another has become conscious of its own distinctive method and concepts and has learned to use them freely as tools no longer in bondage to traditional practices and beliefs. As soon as this occurred in respect to diet, for example, there could be a great increase in the variety, excellence and wholesomeness of food, and each individual could discover through experiment, under the guidance of instruction, just what quantity and quality and regulation of eating were best adapted to his own unique personal requirements. When this occurred in respect to agriculture we saw a rapid increase and diversification in the products of the soil. When this occurred in respect to the art of controlling the movements of ponderable bodies we acquired the science of physics with all its great achievements. A marvelous increase in health and length of life occurred when we learned the method and concepts that enter into the physiological processes and so could free ourselves from bondage to the traditional practices and beliefs about these matters. We have already pointed to the consequences resulting from this in respect to the art of computing the numbers of things.

A universally accepted method as distinguished from traditional practices, and universally accepted concepts as distinguished from traditional beliefs, do not make for cramping uniformity. On the contrary they provide the individual with the only means by which he can develop any of the arts of living in such way as to meet the needs of his own peculiar individuality. There is a method and there are concepts for every human interest if we can develop, distinguish and define them, and learn how to use them freely. This must be done for religion as well as for other interests. When this is done for religion the individual will be able to take this method and these concepts and develop that peculiar adjustment to God which will be most helpful to him individually. He can free himself from the fearful religious cramping and distortion of personality which results when everyone must accept the common beliefs and practices of the group, whether in diet or agriculture or physiological processes or computing the numbers of things, or in religion. Equipped with the religious method and the essential religious concepts the individual can experiment under the guidance of instruction and the inspiration of his religious associates until he has found the best way of adjusting his own peculiar personality to the behavior of events, and especially to that most important behavior which is God. We can imagine no greater good than such a personal religion developed in this way by many individuals.

PART ONE

METHOD OF RELIGION

CHAPTER I

Present State of Religious Thought

With respect to religion there are three classes of people: the religious rationalizers, the irreligious rationalizers and the religiously inquisitive. The first class may think about religion from the outside to defend it; the second class may think about it from the outside to destroy it. But only the third class thinks about it from the inside with a view to discovering precisely what may be the good of it. It alone honestly inquires into its validity, its conditions and consequences. Only this third class makes of religion a problem. The other two merely accept it or reject it without examining into it. This book is an attempt to coöperate with the third class and, possibly, to win more coöperators.

The first class mentioned, the religious rationalizers, are generally very devout and earnest people. Their religion is for them a very precious and holy thing. They acquired it in childhood or youth or in some profound experience of later years. It is quite complete and finished and they have nothing more to learn about it. They have only to enjoy it and use it. They may be very diligent in Bible study, in the study of holy lives, of missionaries and saints, and in attendance on religious exhortation. But all this is for the sake of religious stimulus. It is for the sake of reviving or deepening the emotional experiences, of raising their fervor to a higher pitch and of releasing more energy into practical works. It is not for the sake of examining into the essential merits of the religion itself, the validity

of their beliefs, the source of the experience and its ultimate value to mankind as a whole. All this is taken on faith. It is taken for granted. All their religious discussions and exercises are not forms of inquiry but devices for stimulating further religious experience and moral endeavor. Hence these religious services and discussions generally make them more incapable than ever of entering into any examination of the merits of their particular kind of religion. They may be very glad to talk about religion or hear others do so providing this talk does not arouse any thought concerning the nature and value and true significance of their religious emotions and doings. They want the experience and yearn for more and more of it and are eager to transmit it deeply and widely to others. But the ultimate worth and significance of the experience is for them never a matter of inquiry. Whatever serves to stimulate the emotional glow and the corresponding practical effort they gladly welcome; but anything that turns the light of intellectual investigation upon their religion they bitterly resent. Religion is for them never a problem, hence their power and zeal and steadfastness.

But over against this first group there is another. This second class also refuses to enter into a candid investigation of the merits of religion, but for an opposite reason. It has an antipathy for it. As the first class was blinded with prejudice for, this is blinded with prejudice against. Some of them have studied all about it in Sunday school, but it was presented to them in such a way that they have become sick and weary of it. It is for them a frightful bore, a foolish superstition, an evil influence or a haunting specter, or in some other way distasteful. They have no understanding of it, of course, but they have made up their minds concerning it and will not investigate it with fairness. They bit-

terly resent being forced to give the matter any intelligent consideration. They resent intellectual inquiry into religion as much as the religious devotees we described in the first group. For both these groups religion is something cut and dried and stored away and not to be thought about.

Until recent times the two classes described comprised almost everybody. They still include the great majority perhaps. But there is a third class of persons which is rapidly increasing in number, although it is still very much in the minority. This class is intellectually alive in the direction of religion. Religion is for them a problem—for some of them the greatest problem of all human living. They do not think merely in order to defend their religion against attack. They think in order to understand. They turn the full light of intellectual inquiry upon the holy of holies. Religion may be no less precious to them than to the first group, but for them the most precious things are subjects for investigation.

In many times and places of this world's history the first class, the devout and unthinking, have been the happiest, strongest and most effective of religious folk. Even to-day it is not infrequently so. For as soon as a man begins to think about anything, it begins to change for him. It takes on diverse shapes and hues. It swims about like fish in the sea. Only if he refuses to think about his religion, refuses to make it a problem, can it remain unchanged like sardines in a can. Many an elderly person of this unthinking sort finds his religion the same as it was in boyhood. Through all the years it has sustained him in every time of trouble and inspired him in his daily life. When others were overwhelmed he stood firm because his religion did not fail him.

But the man who thinks about his religion will not find it always the same. Like fish in the stream it not only changes but it may come and go. Sometimes the fish swim away out of sight completely and he may think for a while that he has no religion. The fish will come back if he does not allow the stream to dry up; but it is plain that he must live a much more adventurous life of the spirit than do the devoutly unthinking. He can never tell just what form his religion may assume from year to year, or whether it may seem to fade out completely.

The man who thinks about his religion also labors under a disadvantage when it comes to propagating it, or using it to build up a church or to serve any other cause. The man who is repairing his spade cannot at the same time be digging the ditch. The man who thinks about his religion is working on it, not with it. Consequently the church or other cause for which the man may be working, by using his religion as a tool, may suffer. It need not necessarily suffer, but it may very well do so. Certainly it is much more difficult to spread a religion which is problematical than to spread one that is treated as fixed and finished. You can always distribute canned fish to the public much more easily than the living, squirming animals. Of course the future fish supply depends upon the living fish, not the canned goods. But for immediate results on the fish market canned fish are much more efficiently handled. So it is with a static religion. Many of the strongest churches are fundamentalist.

But however great may be the practical advantages of the unthinking type of religion, there is peculiar need in our time for the thinking type. The reason for this lies in the historical and social situation in which we find ourselves. We are passing through a period of

radical intellectual reconstruction. The fixed and crystallized surface of frozen thought which spanned the waters of religious life for earlier generations is breaking down. It never did remain altogether unchanged. Each generation saw bits of it crumble away; but it never crumbled so fast but that new bits could congeal to take the place of the old. So the ice bridge of religious thought stood firm. But to-day we see it breaking up on every hand. To-day the waters are spouting through; ice cakes are bobbing up and down and breaking asunder. A new bridge must be built, not merely repaired in tiny sections here and there, but a new bridge quite completely. Perhaps the new bridge will never be an ice bridge at all, but a bridge of boats that rises and falls with the stream of life, not rigid and fixed, however the tides may flow. In fact the present downfall is due precisely to the rigidity of the old bridge that would not adapt itself to the rising tides and pouring floods. But however the bridge may be constructed, constructed it must be if human life is to prosper. For religion is a vital function in human living.

But no bridge of thought can be constructed except by thinking. Individuals and groups may refuse to think about religion for the sake of immediate results and practical efficiency. For a time it is easier to ride on a big cake of ice, a fragment of the old bridge, than to undertake the building of a new one. It is easier and for a time it is safer. But not for long. When ice is breaking and melting with the spring floods no big cake is safe. It is merely a matter of time.

Men must think about religion in order to formulate an intellectual understanding of it. For intellectual understanding, which we have compared to a bridge, is just as needful in religion as anywhere else.

Nothing is more precious than historic continuity of

thought and life. It is what makes progress possible. If each generation must begin at zero, or even near to zero, and cannot profit by a rich social heritage, there can be no advance in human good. It is just this historic continuity, each generation building on the works of the past, which makes human life so much superior to that of the lower animals. The health and growth of religion depend upon it as much as anything else. But this progressive continuity of life depends upon the transmission of ideas, meanings, doctrines—call them what you will. It depends upon something which can be communicated, and that means a system of concepts. Without such concepts the transmission of religion becomes nothing more than emotional contagion, a form of crowd psychology. Communication through concepts can occur from individual to individual and generation to generation only as there is some intellectual understanding of that phase of life which is being communicated. There have been times when this intellectual understanding of a phase of life has broken down so completely that it could not be transmitted. Such a breakdown in the continuity of thought occurred at the time of the Renaissance, and the Neoscholastic thinkers of the present time, and historians generally are trying to heal that breach with the Middle Ages. Art has failed to develop consistently throughout human history largely because there has been no adequate intellectual understanding of it, and hence it could not be adequately communicated.

Where theory is lacking, consistent progress is impossible. Religion is threatened with such a collapse of theory. If this breakdown should occur we should pass into a period which would correspond religiously to what happened at the close of the Ancient World in the field of science. We should have the Dark Ages of religion,

just as that other period had the Dark Ages of science. If we are to avoid this threatened breakdown there must be some strenuous and widespread thinking upon the subject matter of religion. People must be turned from their unthinking devotion to religion and their unthinking antagonism to religion and must be induced to undertake the intellectual labor of achieving some system of religious doctrine that can be communicated. Religion will never perish, but it may degenerate into a monstrous horror.

So we say, our present religious situation demands in a peculiar way not only zeal and devoted loyalty to the faith, not only action and emotion. In fact action and emotion, as we have shown, often tend to drive out thinking. The strenuous and emotional application of religion to convert the sinner and comfort the saint has generally dominated the life of religious leaders; but just now it is more urgent that we intellectually interpret our religion. The religious person emotionally devoted to his faith and strenuous in using it for personal and social uplift is often the very man who most bitterly resents all thinking applied to religion. Such intellectual investigation is often for him the work of the devil. But if he drives the thinker away from religion he is himself joining forces with the devil because of the peculiar emergency in which religion now finds itself. Not only soul winners, not only religious propagandists, not only emotional energizers and church organizers, but thinkers are needed in the field of religion to-day.

Some may object to our statement that there is a present crisis in religious thought which is any greater than that of 1500 or 1600 A.D., when Copernicus and Galileo made astronomical and physical discoveries which required a radical reconstruction in our whole view of the world; or than that which arose from the

teaching of Darwin and Huxley in the field of biology; or that which revolutionized our view of the historical background of Christianity under the leadership of such historical critics as Strauss and Renan. At the present time it is research in the field of psychology and sociology which is demanding a reconstruction in our thinking. This demand will become more radical as these sciences advance. Then, looming up back of them, too vast and complex for most people to discern as yet, but sure to make further demands upon the reconstructive powers of religious thought, is the theory of relativity. But why, it may be asked, should we say there is anything critical in the present situation, since these scientific discoveries and these changes have been going on for over three centuries?

Our answer is that the required reconstruction of the religious viewpoint has not been going on for these three centuries. That is just the point. If it had been going on there would be no crisis at the present time. But instead of reconstructing as each successive wave of scientific research struck it, religious thought has merely patched and repaired. It has not thoroughly reconstructed.

Now a system of thought, like a bridge or machine, can endure for a long time by merely patching and repairing. But if thorough reconstruction is required and not made, a crisis ultimately arises. The need is cumulative. A condition is finally reached where a little change here and a bit added there is not sufficient. It becomes a question of collapse or reconstruction. Such we believe is the crisis which religious thought is approaching. It is not because the scientific views of to-day are more revolutionary in their effect upon religious thought than were those which pronounced the world to be round and not flat, but it is because religious thought did not

thoroughly and consistently adapt itself to scientific procedure when that first demand was made. It merely developed a system of apologetics; it merely patched and repaired. And it has been doing that continuously with each successive new scientific advance. Hence the pressure for reconstruction becomes stronger and stronger. It is in this sense that we are approaching a crisis. Even though the method of patching and repairing should continue to suffice for another century or so, religion would greatly suffer. The work certainly should be done in this generation, even though it were possible to get along without it.

During the last three centuries—the seventeenth, eighteenth, nineteenth, and now the first quarter of the twentieth—religion has been losing ground. Fewer people are interested in religion and those who do take interest are less intensely concerned than has been the case in many other periods of the world's history. This decline of religion is probably more marked in Europe than in United States, although it is certainly true of this country also. There have been revivals of religious activity during this period, but the successive revivals have not reached so far nor so high as earlier ones.

This does not mean that religion is dying out. Religion can never die out, any more than art or friendship or thinking can die out as long as humans maintain themselves on the human level. Of course they might not do this. It is conceivable that man might sink to the level of the lower animals as far as concerns any interest which makes him distinct and unique upon the face of the earth. This, however, is not at all likely. All the evidence points to the opposite direction. If religion be, as we hope to show it is, an essential part of that total system of activities which makes the human way of living different from that of the lower animals,

then religion can never die out from the life of human kind.

But religion has its ebb and flow just as other essential interests in human living. Art has its periods of great achievement when men are widely and deeply concerned with it, and then it has its periods of relative decline. The same is true of science and philosophy and social organization and all the other essentials of human life. It is in this sense only that religion has been declining.

The reason why religion has been declining, and will continue to decline until the mistake is rectified, is because its distinctive method and essential concepts have not been clearly recognized. In other words, the thinking side of religion has not been adequate. People have identified religion with that which was not religion. Even those who were themselves sincerely and profoundly religious have often thought that their religion consisted of that which was not essential to it at all. For example, they have thought that the theory that the earth is flat and that the sun goes around the earth was a part of the life blood of their devotion, "because the Bible said so." They have fought for such beliefs in the name of religious faith. The same is true to-day in the attitude of many toward the theory of evolution and, most recently, in the theory of the nature of the mind as portrayed by psychology.

As long as this confusion continues concerning what are the essential concepts of religion, as long as it is so mixed with foreign elements as to be indistinguishable from them, it will continue to lose ground. Consequently we believe nothing is more important than to clarify the essential nature of religion and especially its unique work in human life as a distinct function along with thinking, society, art and morality.

Here we can make a fruitful comparison between religion and science. Science has grown and prospered immensely during the last three centuries. It has had to transform its theories again and again. It has had to give up what it held to be true. Most basic "truths," which many scientists thought were fixed and settled, have been discarded. And yet with all this transformation and unsettlement of accepted "truths," science has gone on flourishing, and was never more triumphant than to-day, when the theory of relativity and the quantum theory are tearing out some of the deepest foundation stones of the structure of thought which it has reared. In contrast to this, behold religion! Against every attack upon one of its deep-laid accepted "truths," it fights most bitterly. And when it is forced to discard what it had accepted as true, it becomes more discouraged and uncertain, more weak and sickly.

Why should science become more strong and self-confident with every shock and transformation of accepted truth, while religion grows more frail and anemic with the same experience? Is it not because science does not identify itself with any of its accepted beliefs, but only with certain concepts and a certain method? Science welcomes the discovery of errors and contradictions in what is believed as an opportunity for further application of its method and correction of its beliefs.

Now if religion is to grow and prosper as science has been doing and as religion must do sooner or later, if human life is to preserve any reasonable measure of health, it also must cease identifying itself with fallible "truths" and must see that what it consists of is a certain essential function in human living and of a certain peculiar method and concepts by which that function is fulfilled. Breathing and eating are functions necessary to animal life. Science and religion are func-

tions necessary to the progressive and complex manner of life which humans live. Life lived with the fulness and breadth which modern conditions require would swiftly crash to disaster without scientific thought and method. Hence science has an indispensable function to fulfil in modern human living. The same is true of religion, presumably. But its function and method have not been adequately defined. Its unique service to human life must be clarified and its peculiar method made plain if it is to continue to do its proper work. When this is done it also, along with science, may play its part triumphantly in a changing world and grow strong and self-confident rather than weak and discouraged with constant unsettlement of accepted "truths."

We are not discounting the value of truth. There is nothing in the world more important than truth. We are only discounting the value of "truth." Human belief is fallible and there is no way of escaping its fallibility. "Truth" is what we mistakenly believe to be true. There is no infallible rule of faith and practice which will keep your beliefs and my beliefs free from all error. The greatest foe to truth is tenacity in clinging to unjustified belief. Religion must rest upon objective fact, just as much as science. Indeed we would say religion is more involved in objective fact, and more dependent on the truth concerning it, than science. Science can make great use of workable theories for a time, even though they involve much error. The same is true of religion, but to a less degree. Religion craves truth and lives by means of truth, even more than science. This craving for eternal truth is so strong that it makes the religious devotee leap to the conclusion he has such truth in the form of certain beliefs, when in fact the beliefs may be quite mistaken. But if religion will clearly define its essential function and method,

and keep true to that, it can weather doubt and the overthrow of established belief for the sake of a greater measure of truth in the end, even as science does.

The distinctive function and method of science has been widely and intensively studied until to-day all well-informed people understand it. The same cannot be said for religion. Some may say the function of religion is creative inspiration and its method worship. But the nature of these has not been clearly grasped nor their grounds established. Neither is there any unanimity in the belief that this is the method and nature of religion. There is something very shaky and uncertain in the whole matter, which bodes ill for religion and ill for human living.

Historically many of the most bitter disputes have never been resolved; they have merely been outgrown. They hinged upon misunderstandings and consequently the dispute was not worth the air expended to maintain it. This is not true of all disputes now raging between conservatives and progressives, but in some cases we believe there would be a synthesis of differences if certain misunderstandings could be removed. It is one such point of misunderstanding that we wish here to indicate.

One cannot be truly progressive without being conservative; and one cannot be truly conservative without being progressive. One must be both if one is to be genuinely either. But he who tries to be neither, he who tries to be "in the middle of the road," is worthless so far as religious belief is concerned. He who tries to be liberal in the sense of having no well-formulated convictions, and so is ready to receive anything, has lost his savor and is good for nothing save to be cast out and trampled under the feet of men. If we distinguish the essence of religion from its machinery this middle-of-the-road policy is the most foolish and futile of all.

This phrase "middle-of-the-road" is, however, subject to grave misunderstandings. Different people use it to indicate very different things. Some people who profess this policy mean not that they lack definite convictions but only that they wish to be conciliatory. Of course there can be nothing but praise for the man who tries to be conciliatory.

We have said that to be progressive one must be conservative. To be conservative is to conserve the good which the past has achieved. To be progressive is to add to that good. But how can one add to the good if it is not conserved? Hence one must be conservative in order to be progressive.

We cannot be too conservative providing we conserve truth rather than error, good rather than evil. One should be conservative with all his might if what he conserves is of value. The accumulated treasure of the generations that have gone before us is certainly greater than the good wrought by any single generation, even though it be our own. The conservation of this accumulated body of achievement from the past, then, is the first essential of effective living. The tower of Babel cannot rise toward heaven unless the work of past generations be conserved. Hence if one is truly progressive one is bound to be conservative.

The most precious gift from the past, that which must be conserved above all else, is not the actual achievements which are handed down to use in the form of cities and railroads and power plants and highways and dams and books and libraries and works of art. These are precious to be sure, but we can refashion them if we preserve the technique by which they were produced. The technology, laboriously developed throughout countless generations, is far more important than any product of that technology. We want to conserve the golden

eggs if we can; but if we must choose let us first of all save the goose that lays them. Even works of art, irreplaceable though they are, are not so precious as that slowly maturing technique out of which further works of art can spring.

But there is something even more important than technology to be conserved; for it is that which gives rise to developing technology, as technology produces the completed works which we inherit. This something else, for lack of a better word, we can call aspiration. It is that vague sense of something yet to be which makes human nature creative as the lower animals are not. It is that deep solicitude for the unborn and the newly born, not merely in the form of human beings but in the form of efforts and achievements and possibilities, which makes human history and human society progressive as that of other animals is not. It is capacity for great joy in the nurture of institutions and movements and strivings and all growing things throughout that long period before they yield any fruitage. It is the creative spirit.

Now this creative spirit is not born with us. Most humans have the capacity for it if it is cultivated in them. But it must be cultivated. And how can it be cultivated? One becomes creative, and hence truly progressive, only as he discovers in the strivings of the past the reach which exceeded the grasp. To be progressive one must conserve this grasp-exceeding reach. To be progressive one must be conservative of the long-deferred hope.

This creative spirit which we get from the past is more definite, however, than a vague sense of things yet to be developed. It must be more definite if progressive effort is to be effectual. Certain objectives of human endeavor, however dimly discerned, must be

gathered from the past to guide our aspiration and make it somewhat continuous with the constructive efforts of our forbears. What stirred these men of other days to strive as they did? Some vision there was. Their aspiration, their hope long deferred, their sense of failure must be assimilated into our lives if we are to carry to larger fulfilment and clearer apprehension what they failed to accomplish. Their failure is the best gift they have to offer us, if we measure their failure by the greatness of the goal they vaguely discerned and unsuccessfully strove to attain. To be progressive we must be conservative of their sense of failure.

We have used the word goal, but that is inaccurate. There is no final goal, but there are tendencies which preserve some continuity throughout successive generations and centuries, and we can speak of progress only insofar as such tendencies are preserved and amplified. An example of such historical development of human endeavor outside the bounds of religion is the growing theory and practice of the common law as traced by Roscoe Pound in his *Spirit of the Common Law* and *Introduction to the Philosophy of Law*. We cannot see things precisely as other ages have seen them, but we must catch something of the vision that actuated them and the purpose unattained if we are to carry on the uncompleted work of yesterday. To be progressive one must carry on some uncompleted work. One is not progressive if he starts at the ground level and does not build on the tower which other times have reared. No doubt he will have to reconstruct the tower, but he must feel the throb of the hope that caused the fathers to toil as they did, and conserve some sketch of their blue print, else he cannot be progressive.

Therefore we say the true progressive is bound to be conservative; and the conservative must be progressive.

So we conclude that this alignment of parties, and this zeal of individuals to identify themselves with the conservative or the progressive faction, is a mistake. Certainly these two opposing groups exist. Probably they always will. But he who wishes to be intelligent in the matter will not commit himself to either side to the exclusion of the other. Neither will he take a middle position. The middle position most of all he will abjure. But he will be both conservative and progressive. To be sure, one may ally himself with a party simply because it is impossible to accomplish anything in many cases except as one works with some group; and one will work with that group which seems to promise the most beneficial results. If there is no other group with which to work save only a conservative or progressive party, one may be forced to take sides. But privately, in his own mind, he will see that either one without the other is gross error.

There is no fight between the true conservative and the true progressive, because the true conservative is a progressive and the true progressive is a conservative. It is the quack conservative who fights the progressive; and it is the quack progressive who fights the conservative.

The quack conservative is the man who thinks he can be a conservative without being a progressive. He has failed to conserve the chief good which his fathers have to bequeath, which is the spirit of progress itself. He guards the stones and timbers but has missed the inscription they bear. For, as Kipling says, hewn on every timber and carved on every stone, in that wreck of a palace that other ages tried to rear, are these words: "After me cometh a builder. Tell him I too have known." The false conservative practices the old forms but has lost the adventurous Promethean way which

brings fire down from heaven. He does not understand the inscription. He does not conserve the hope deferred and the reach that exceeded the grasp.

The quack progressive is the man who thinks he can be progressive without being conservative. In truth he is a fanatic. He lacks that breadth of vision and depth of insight which only the past can teach him. He has looked on that wreck of a palace and seen how crude the stones and timbers, how worthless the plan, but did not dwell upon the wreckage long enough to read the inscription and catch the aspiration embodied there: "After me cometh a builder. Tell him I too have known." Hence he is not a progressive, however loudly he may insist that he is. He lacks the spirit, he lacks the culture, without which progress is impossible.

The progressive will recognize his own features in the portrait we have drawn of him but may not recognize the true conservative as we have sketched him. The word conservative, he may say, does not properly apply to the kind of person we have described as a true conservative, who is also a progressive. On the other hand the conservative, if genuine, will recognize as true what we have said about him, but may deny the validity of the case which we have made for the progressive. That kind of a person, he will say, who is also a conservative, is not a progressive at all in the general acceptance of these words. If such should be the case, if the conservative and progressive should each recognize himself but not the other in our portrayal, it would prove that our statement is correct. It would show that we have rightly stated what each has in mind to support when he is true to his own cause. It will also prove that the conservative and progressive do not understand one another when they fight. The genuine conservative and genuine progressive have no grounds for quarrel; each is

simply emphasizing a different side of the same common good. Each shares the purpose of the other, even though each, through misunderstanding of the other, should fail to see this community of purpose. Each is indispensable to the other as a fellow coöperator insofar as each supplements the emphasis of the other. Aside from misunderstanding on this point, it is the quack who causes all the trouble between conservatism and progressivism.

CHAPTER II

The Method of Religious Inquiry

Three uses may be made of the idea of God. It may be used to edify, to convert the sinner and comfort the saint, to stabilize society and uplift humanity; or it may be used to achieve conformity to ancient religious tradition; or for purposes of experimentation. It is the last of these three which interests us just now. But in order to distinguish it clearly from the others we must examine all three. They differ not only in use but also in content, for the use determines what the idea shall be. The idea best adapted to edification cannot be used for experimentation. The traditional idea, on the other hand, may be edifying, but it does not ordinarily meet the requirements of experimental method. The experimental idea is a proposition which points out something that can be progressively investigated by the method of experimentation.

In this chapter we shall endeavor to formulate a proposition about God suitable for experimental uses. But first let us examine the other two, the edifying and the traditional ideas, in order that we may not confuse them with the sort of idea we are seeking.

We are using the word edify in a very broad sense. We mean any aesthetic use of the idea, any inspirational use, as well as any application of the idea for the purpose of changing human lives for the better. Some people, perhaps most people, want a beautiful idea of God and will entertain no other, just as they want a

beautiful presentation of a tree or a flower. They resent the scientific idea, which is devised for purposes of investigation. Yet this is precisely the difference between the edifying and the experimental idea. The latter is formed for purposes of investigation, the former is not. Most religious people want an idea of God which they can contemplate with delight, which will make them forget the pain and change and peril of everyday life and give them peace. Such an idea is enjoyed for the same reason and in the same way as beautiful music or any work of art. The same difference holds in the case of the tree between its artistic and its scientific presentations. Of course the latter only yields knowledge, but that is another matter. The exhorter wants an edifying idea of God to entrance his hearers, to inspire them to live better lives, to comfort them in their troubles and to turn them from the evil to the good. The organizer wants such an idea to hold people together and constrain them to do his will.

When we see how people crave the edifying idea, and how useful it is to the orator, the organizer, the consoling pastor and all the leaders and molders of society, it is small wonder that it has generally crowded out the experimental idea quite completely except for a few rare individuals. The same has been true, however, although to a less degree, of men's ideas of all objects. Science was held back for thousands of years for this very reason. As long as the aesthetic idea of tree and river and fellow man and social group dominated all minds these objects could not be investigated. They could not be truly known; they could only be enjoyed or suffered. The tree could be a nymph, the river a god, the fellow man could be a witch or a devil or an angel sent from God, and the social group could be enslaved to a totem. But the investigation of God is

being held back longer than that of any other object because its aesthetic value is greater and its utility for the orator, organizer and other masters far exceeds any other edifying idea. Consequently men bitterly resent the suggestion that they entertain an experimental idea of God.

The only competitor to the edifying idea has been the traditional. Happily, however, the two have often merged and to some degree perhaps always do. Is there any idea which will "satisfy the soul" so richly as the one acquired at "mother's knee"? What idea can yield so much "peace" as the one handed down through many generations until it pervades all those habits which have been wrought into our lives by the mores of our people? And what can so powerfully convert the sinner and bring him back to the ancient paths as such an idea? No other idea can serve so well as an instrument for "building up the church." The traditional idea is often more edifying than one expressly designed for its social utility and aesthetic value. However, the two are not always identical, and certainly there is great difference between the motives of the traditionalist and the one who subordinates tradition to edification in his religious views.

The difference between the fundamentalist and the modernist is right here. Both cherish edifying ideas. Each clings to that idea of God which he believes yields most comfort and is most effective in improving human conduct. But for the fundamentalist this is a by-product. If humanity should not receive benefit from the traditional ideas he entertains, so much the worse for humanity. The fundamentalist does not professedly and deliberately shape his ideas of God with a view to their beneficial effect upon his own soul and upon humanity in general. But this is precisely what the modernist

does. Perhaps the difference between the two is only a matter of degree. In fact, we are sure such is the case. Neither wholly discards tradition and neither wholly ignores the beneficial effects which his religious views have upon his own life and the lives of other men. But the fundamentalist gives priority to the tradition, the modernist to the pragmatic consequences. As we have just seen, the fundamentalist has by far the stronger position.

But there is another kind of idea altogether, the idea designed for purposes of investigation. No doubt this sort of idea, or the impulse to formulate this kind of idea, creeps into the mind of the modernist at times. There may be, as in different ages no doubt there always have been, individuals who were dominated by this impulse. But until the modernist yields himself over to it quite completely there can be no solution of the problem which has caused the controversy between the fundamentalist and the modernist, and in the end the fundamentalist is bound to win the controversy, although he will not solve the problem. For the idea best adapted to edification is never the one best adapted to investigation. Comparison of any scientific concept of an object with the edifying idea of that same object proves this. We must distinguish between the object as something to investigate and the object as something to enjoy. God should be enjoyed, no doubt, just as friends and flowers and social groups should be enjoyed. But all these should also be investigated. And the ideas best adapted for the one should not be confounded with the other.

The most difficult step to take in the search after knowledge is not the actual work of experimentation, painstaking and hazardous though that may be. But it is rather the formulation of a fruitful proposition

which shall guide the work of experimentation. It is impossible to experiment without such a proposition. The old Baconian notion that one could investigate without an hypothesis has long since been demonstrated false. It is equally erroneous to think that any idea can be used experimentally. Most ideas cannot, if we understand by idea any apprehension we may have of an object.

As matter of fact men have experimentally investigated God, although generally in a crude, haphazard way and without clear recognition of what they were doing. Were it not for this we would have no knowledge whatsoever of the religious object. Rare individuals, without recognition of experiment as a method of achieving wisdom, have nevertheless lived experimentally with complete abandon. With the insight of genius they may have hit upon a guiding proposition which rendered their experiments profitable from the standpoint of knowledge. Such have been the saints and the prophets. They lived hazardously, for experimental living is always hazardous. They lived "by faith" after the manner described in the eleventh chapter of Hebrews.

But since these prophets were not clearly aware of the nature of the experimental method, even when practicing it, they could not distinguish its results from ideas arising elsewhere. So their teaching was generally mixed with much that was not authenticated by experimentation. Furthermore, after the prophet was gone, or even while he was still living, there were others who still further diluted and distorted his ideas in order to adapt them to the needs of edification or fit them into conformity with ancient tradition. When the priest and exhorter, the organizer and inspirer had done their work, the original message of the prophet was hard to find.

But now let us turn to our central problem. What proposition about God can be made which will serve to guide any experimental investigation Certainly those statements which pile up honorific adjectives about God cannot serve. God may be "a spirit, infinite, eternal and unchangeable in his wisdom, power, holiness, justice, goodness and truth." But such a proposition has little value for the experimental method of search after knowledge, although it certainly presents a delightful and inspiring object of contemplation. But to use it as a means of search would be as though a scientist should describe in glowing terms the beauty of a tree and then make this description the proposition by which he investigated the kind of soil and climate required for its best growth.

But might we not formulate a proposition about God in some such fashion as this: God is that in the universe which will yield maximum security and increase of human good when lives are properly adjusted to him? This idea is not preëminently fitted for edification or for conformity to tradition. But let us examine it to see what values it may have for uses of experimentation.

In the first place we know with certainty that this proposition refers to something truly existent in the total environment with which we interact. Just what it is we do not know. If we did know there would be no need to investigate. But we know it is there and we know it is good beyond anything else in the universe.

How do we know it is good when we do not profess to know what it is? Because, by definition, it is that Something, however unknown, which would and which does bring human life to the largest fulfilment when proper adjustment is made to it. Whatever does that is the most precious object of human concern. Nothing

else can equal it in value. We may not know what specifically its characters may be, but we do know that its goodness transcends the goodness of everything else in the universe.

How do we know with certainty that it is there, somewhere or everywhere, in the world round about us? We know it is there because all the goods of life are dependent upon making proper adjustment to conditions of environment. Amid these environmental conditions, some of which are social and some not, some are of much more importance than others in sustaining and magnifying the good of human living. Some are positively evil in the sense that they destroy human good. The best adjustment to these evil conditions is to escape their baneful influence or reduce it to the minimum. There is no positive good to be obtained from them. But amid all these conditions, good, bad and indifferent in their bearing upon human life, some must be most important and most productive of good under proper adjustment. Therefore we know our proposition about God points very definitely to something in the total environment and something which is supremely good over all else, and a matter of most vital concern to the total conduct of all human living.

Thus our proposition meets the first two requirements of experimentation. It points to something which is actually existent and going on in the total environment, therefore something which can be investigated by the methods of experiment. Furthermore it states the distinguishing feature of this object by which it can be identified, namely, the most important thing in the universe for all human living.

We can go still further in clarifying the significance of our proposition about God as an instrument of experimental investigation.

For the sake of simplicity we have spoken of certain conditions in our environment as being that to which our proposition pointed. But the word condition is not adequate. It connotes a passive state of being. The universe is a total going concern. It is a total event which is transpiring, and every part and phase of it are happening or have happened or will happen. The universe is a total event made up of an infinity of included events. In a word, the universe is constantly behaving. This behavior of the universe is infinitely complex and varied. Every individual human being is one tiny bit of this total complex behavior which is going on. The whole history of mankind is one infinitesimal phase of this total behavior.

This behavior of the universe displays a certain pattern. It has a certain order and structure. Within the total system of this behavior there may be many subordinate systems, some more or less antagonistic to the most inclusive order. Or it may be that the whole universe displays two or more patterns of behavior, neither of which is more inclusive than the other, but both of which are antagonistic to one another. But in any case there is some pattern of behavior, displayed by this universe, which is God because it is that upon which greatest human good depends.

Now the whole welfare of man depends upon attaining a certain correlation between human behavior and the behavior of the universe, especially in respect to those phases of the universal behavior which bear most critically upon human life. Human life has come into existence because of a certain behavior going on in the universe. Human life has advanced from its most lowly and miserable stages to its highest attainments because of a certain behavior going on in the universe and the adaptation of man's behavior to it. Human life has been

cradled and fostered by this behavior of the universe. God is that behavior of the universe which has thus nurtured human life and which continues to keep it going and growing.

The objective of religious experimentation is to discover as clearly and fully as possible this particular behavior which is going on in the universe. For this is God. This is the object designated by our proposition.

The behavior which properly may be called God is that which preserves and increases to the maximum the total good of all human living where right adjustment is made. In the same way precisely an individual human being is a certain behavior of the universe, although not the behavior of the whole universe. Sam Jones is that behavior of a certain part of the universe which writes in a peculiar inimitable scrawl, brushes his hair in a certain way, runs the grocery store, makes a certain finger-print and sits beside a woman called his wife when he goes to church. Every human can be identified by his behavior, and by nothing else. We go farther and say every human is his behavior and nothing else. So also ice and carbondioxide and electricity and bantam roosters are identified by their behavior. They are a certain behavior which the universe displays. The same is true of God. He is that special kind of behavior in the universe which is most beneficent to humankind. He is that behavior which has brought forth human life upon this planet and continues to provide for it despite all the follies and evils of men. He is, therefore, that behavior in the universe which is best distinguished from all other by calling it Father, just as we distinguish certain other behavior by calling it Sam Jones.

But just what is this behavior of the universe which is Father God? We do not know with any clarity and

fulness. We cannot discover it by means of any of the techniques of the several sciences, because the scope of each of these is too limited. The behavior which these sciences can investigate is only of the simplest sort due to the narrow limitations under which our present scientific technique labors. No science, for example, can portray that total complexity of behavior called human personality, not because personality is unknowable but because its behavior is too complex for any technique thus far developed. Psychology and sociology come closest to this attainment, but they have scarcely yet reached the status of science. They still perforce depend in great part upon the rough methods of common sense. Of course common sense practices the method of experimentation and achieves much knowledge in that way, but it cannot do so with the accuracy of scientific method. It cannot altogether exclude irrelevant materials.

But if the behavior of the human individual is too complex for any science thus far achieved, much more does the complexity of divine behavior exceed these limits.

Nevertheless, while the exact and refined methods of science cannot investigate God, we have the experimental methods of common sense. We can live experimentally, as the saints and prophets have always lived who have given us whatever valuable information we have about God. And we can also do more. We can conduct our living experiments with full understanding of what we are doing because we now understand the nature of the experimental method as men of other times did not. They practiced it but without clear understanding of its significance. Consequently they could not guard, as we can guard, against admixture of ideas from other sources. Most of those who have lived lives which

brought to light something of that behavior of the universe which is God did not distinguish between the results of their experiment and a great mass of traditional and edifying beliefs which had nothing to do with the experiment itself. Hence their reports are an odd mixture of the important and the unimportant, the experimentally tested and the irrelevant. Some such mixture is inevitable as long as we are limited to the methods of common sense. Only the strict scientific method with its fine technique can eliminate this source of error; and for the investigation of God this exact technique is unavailable, as we have seen. But when we clearly understand what we are doing we can free ourselves of much of this intermixture of the traditional and edifying. Furthermore, while the exactness of pure science is beyond our reach in this undertaking, the sciences can be of great assistance. Especially is this true of the social and psychological sciences. These are at the present time rapidly developing and we can look to them for an increasing amount of help in our search after God, although we cannot hand over this search wholly to their keeping or to the keeping of any other science thus far achieved by humans.

We must not forget, however, that experimental living is hazardous living. It is far more hazardous than any scientific experiment because it involves the whole life, not merely biological existence which may well be sacrificed in scientific investigation. But in religious inquiry one must cast into the experiment those larger goods, including all that one holds dear, his moral character, his highest aspirations, his greatest loves and loyalties, those things without which mere bodily existence is worthless.

Let us quote Professor Hocking, himself a great spirit speaking out of a profound experience:

> If anyone assumes a position of moral leadership, and therefore of moral solitude, he cannot wholly avoid fearing his own audacity; hence the conflict which we know to have taken place in the minds of such men as Mazzini, Luther, Lincoln—the conflict of determining the narrow margin between the true and false presumptions. The reported temptation of Jesus seems to be a symbolical account of an inner struggle such as could occur only to one who had gone far on the way to a great cast of cosmic boldness. To presume so much was to "make himself equal with God"; to presume less was to be false to his own genius.

They who live experimentally must suffer the great pangs and the great terrors. Others can live very comfortably in comparison.

> Absence of belief that the world as a whole has an active individual concern for the creatures it has produced [and refusal to investigate the matter by experimental living] need neither destroy happiness nor the morality of compassion. Life would always be worth living and worth living well, so long as free from the major torments. Instinct has its satisfactions in an uninterpreted or partly interpreted condition; it will reach some accommodation to the world that is. Nothing would necessarily be destroyed or lost from the good life which some at least of the human race now know and many hope for—nothing except the higher reaches of curiosity and sympathy, and the wisdom of developing them. It is only the enthusiasts for a far-off good, for an endlessly progressive humanity, for a profound and logical love of life, that would be cut off; it is only the martyrs that have played the fool; only to saints and sages the world has lied.[1]

In order to plumb the depths of the world's behavior, in order to bring to the surface that deep working of the universe which is God, upon which must depend

[1] W. E. Hocking, *Human Nature and Its Remaking*, p. 415.

the most abundant living, one must stake his dearest and greatest goods upon a venture. Then, when he has done his utmost and given his all, he must wait and listen quite helplessly to see if the world responds, to see if there rises up from the hidden sources of behavior that which will sustain his venture. There is no better example in this world's history of such venturing than that of Jesus in Gethsemane and on the cross, crying, "My God, my God, why hast thou forsaken me?" The response came, magnificently, at last, after his death, carrying his work on to fulfilment. He revealed the most of God because he made the uttermost experiment.

But we must remember that the value of all such experimenting is measured not by the magnitude of the sacrifice involved but by the nature of the proposition which is being tested and by the intelligence, the skill and the caution with which the experiment is conducted. There is a bravado and self-glorification through sacrifice which is worthless. Formulation of the proposition, the hypothesis, is always the crucially important thing in any investigation of the world's behavior.

What was Jesus's proposition? What was the hypothesis he was testing by the experiment of his life? We would not presume to formulate it precisely, but surely it had something to do with love. Was there in the universe a behavior, however latent, which would respond to love? If he loved intelligently, honestly, without sentimentality, unreservedly, would the behavior of the world swing into line and support the venture? Was love truly more mighty than violence, more irresistible than logic or art or any social institution or organization except as these embodied love? Was the complete lifelong self-surrender of love for God and man the way to make adjustment to that hidden behavior of the universe which would sustain the maximum secur-

ity and increase of human good? Was love the greatest instrument of human achievement and the largest fulfilment of human life? Could one conquer his enemies by love? Could he overcome the world with it? Was it mightier than all the power of Rome? Shall the meek inherit the earth?

Jesus made the experiment. The results are not yet all in; the experiment is not completed. The decision still hangs in the balance. But Jesus was experimenting. He was testing a proposition in order to make manifest and pervasive throughout human living that behavior of the universe which is God.

CHAPTER III

Worship as Means to Successful Living

Life of any sort, and certainly the best life, is not achieved by human effort alone. Rather it is something produced by environmental conditions when we make right adjustment to them. Take, for example, the very simple case of breathing. It is frequently assumed that the organism does the breathing. As matter of fact the environmental air plays a far more potent and difficult part in breathing than do the lungs. The lungs simply provide a partial vacuum; the air rushes in of its own accord. And when the lungs are contracted the air rushes out in a way that only it can do. The same potent and delicate working of environmental conditions can be traced in the more complex process of assimilating the needed elements from the air into the blood. Or take again the case of walking. It is not the body alone that walks. The earth does the walking, the body merely adapting itself to those conditions which automatically bring about the walking. To walk is to fall continuously and catch yourself as you fall. But it is the earth's gravitation that makes you fall and it is the earth that catches you when you put out a foot in front. Hence it is the earth that does your walking for you.

What is true of breathing and walking is true of loving and thinking and appreciating beauty and all the other works and joys of living. In all cases certain environmental conditions initiate (stimulate) and sus-

tain the process, the organism merely adapting itself in such a way as to permit these conditions to fulfil the process called living. And in the highest form of living, in that abundant living which man at his best attains, the environment does not recede, but rather becomes more intimately and richly involved. To live more abundantly is to interact more fully and widely with the total environment.

The sole part we humans have to play in living, whether at the biological level or at the level of most joyous and triumphant living which the greatest spirits have known, is to establish those habits which are so adjusted to environmental conditions as to make it possible for these environmental conditions to produce such a life. Living, then, consists of these two sides; on the one hand the habits, adjusted or to be adjusted; on the other the environmental conditions which sustain or destroy. Let us glance at each of these separately.

Habits are more or less complex. We have simple habits and organizations of these simple habits into systems more complex. Finally there is that totality of habits, more or less well organized, which makes up the total personality or self. There are habits of thinking and feeling. All the secret recesses of the mind have their habits. There are many different ways of forming habits, especially the more simple and subordinate ones. But there is only one way of reorganizing that totality of habits which make up the complete personality; and that is worship. Worship is the way we seek to organize and adjust that totality of habits, making up the self, to that feature of environment upon which we are dependent for the best that life may ever attain. Worship is the only possible way to form those most subtle and complex habits of the heart and

mind which organize and mobilize the total personality with all its resources of experience and all its impulses. We have great masses of experience accumulating throughout our whole lives. These experiences are more or less chaotic and conflicting and harmful to our welfare until they are so ordered and shaped by habit as to be helpful to all that we undertake. Worship is the way to organize this totality of experience in such a way as to achieve adaptation to the most vital and potent factor in our environment. Other methods serve to develop subordinate habits, but only worship can develop in adequate fashion our total system of habits.

The environment is made up of innumerable activities some of which are far more helpful to human living than others, providing we learn how to establish right connections with them. That activity, or those activities, which are most helpful constitute what we call God. They are (or it is) to other activities as the ocean current is to the ripples and waves and storms that play or rage over the surface. If we can make connections with the ocean current and be borne by it, we can weather the waves and winds. Worship is the way we establish that system of habits which is so adapted to the total environment as to catch the supporting lift and movement of this most helpful phase of our total environment—God. Worship is the only possible way in which we can seek out the support of this most helpful activity, because, no matter how we go about it, when we do seek out best adjustment to it we are doing what is properly called worship. Worship is the name we give to that kind of endeavor. Worship is the heart of religion.

I think of a little street car in Los Angeles that carries people to the top of a steep hill. The hill is so steep that the car cannot use a trolley. It is lifted by a steel

cable which runs endlessly beneath the car and between the rails. But the car does not move until it connects with the cable in proper manner. The car stands still until its passengers are in, then a certain clamping mechanism closes down upon the cable and the car is lifted to the top of the hill.

Man attains the best life by clamping a certain cable. The cable consists of environmental activities. These activities in that order and phase most beneficent to mankind constitute God. Worship is the way in which we establish those habits which are best adjusted to this order of the universe which is God. Worship is the way we clamp the cable that lifts the highest.

But there is a vast difference in the skill with which different people conduct their worship. Worship is a great art which must be mastered. It has its method and technique. Probably the great majority of people, probably the great majority of Christian people, have not learned how to worship in such a way as to accomplish very much. Yet there is no other form of human endeavor by which so much can be accomplished. An interchange of thought on this matter of how best to worship ought to be exceedingly helpful to all. It is with hope of learning by such an interchange that the following suggestions are made.

Worship has three stages. The first is that of exposure. One gives himself a time exposure to God. One puts himself amid those physical conditions and in that bodily and mental state in which he can feel most profoundly and pervasively the stimulus of that order of being which most vitally affects him. The use of scripture, devotional works, meditation, lives and teachings of holy persons may be helpful. But all these enter into worship only as they serve to expose one's total capacity for response to the supreme demands of his whole envi-

ronment, especially to that which he believes to be of greatest concern to human living. Through this exposure the deepest drive of one's nature is awakened and its highest aspiration. Our fathers called this state of worship praise and adoration.

The second stage in worship is diagnosis. We must find out wherein our habitual adjustments are inadequate for realizing those possibilities which the environment has in store for human living. What is wrong with our "clamping mechanism"? How can we better lay hold of the lifting cable? One can best judge himself and discover what is wrong when his highest aspiration is lifted and he is groping after better contact with God. When his most inclusive purpose is running strong the obstructions to its current are best revealed. The inhibitions, the disorganizing habits, the hindering mental attitudes, are then best brought to light. The hidden deficiences and obstructive tendencies in ourselves we ignore except when we seek the highest. Hence worship is the time for self-diagnosis. We must bring forth our self-defeating traits before we can treat them to a cure. Our conceit, our craving for self-complacency and self-respect, our striving for mental ease and the sense of well-being, prevent us from discerning our own maladjustments and hence prevent us from seeking a cure. But in the hour when we are acutely aware of unattained possibilities, in the hour of worship, we can see in ourselves what we cannot see at any other time. Search me, O God, and know my heart; try me and know my thought, and see if there be any wicked way in me. We can be sure the wicked way is there, but for the most part we cannot discover it except by self-examination in worship. Our fathers called it confession of sin.

The third stage of worship is reconstruction. It is that curative treatment which cannot be applied until

after diagnosis. It is that reconstruction by which the worshiper establishes those mental attitudes which are better adapted to "clamping the cable." Since God is some behavior going on in our total environment, we establish desired adjustment to him as we attain adjustment to any other persistent feature of our surroundings, namely, by developing some habitual attitude which is rightly adapted, as the street car was adapted to the cable when it rose to the hill-top. The work of personal reconstruction accomplished in worship at the third stage is precisely the establishment of such habitual attitudes.

The ultimately effective form of prayer consists not in the words we utter, nor in the ideas we entertain, but in those habitual attitudes which the words and the ideas serve to engender and establish. For it is these attitudes which enable God to work upon us in such way as to actualize the desired possibilities, just as habitual attitudes of the organism enable the air to do our breathing for us and other habitual attitudes enable our friends to commune with us. It is a great mistake to think, as many do think, that prayer is merely a matter of words and ideas. It is an attitude of the total personality which adjusts the mass of habits called the self to that order of environment which is most beneficent to humankind, in other words, to God. The words and the ideas may serve to arouse and sustain this attitude, and they may serve to establish a desired habit, but the prayer is in the attitude and habit, not in the words and ideas.

The method by which this reconstruction of habits is accomplished is somewhat as follows. In the stage of diagnosis one discovers his peculiar and most fundamental defect or need in respect to habits. Then he forms as clear and definite a concept as he can of what

is required of him, in the form of readjusted attitude to correct the faulty habit and enable the environment to accomplish what is desired. Then he states this required readjustment of habits in words as comprehensive, accurate, concise and forcible as possible. These words in themselves alone do not constitute prayer; the prayer is in that attitude of mind and body which the words serve to engender and establish. The words should be repeated many times in order to assure the arousal and fixation of this attitude which is the prayer. Always this statement of need should be in affirmative, not negative, language. It should always indicate the desired attitude, not the wrong one from which escape is sought.

This method applies to every kind of effective worship and prayer. Anything that prayer can do can be done in this way. The outermost limits to what worship can accomplish by the threefold method of exposure, diagnosis and reconstruction, we do not pretend to be able to state. But let us illustrate its efficacy by instances which can be readily tested.

Suppose I meet a friend whom I have not seen for some time. Our meeting goes pleasantly enough, so it seems to me. But later, in time of my worship, I discover that it has not been satisfactory. I would never have discovered its inadequacy had it not been for the diagnosis of worship. But in the hour of worship I see that we have not entered into that community which we both sorely need for effective living. We have talked of trivial things. Now trivial conversation is not objectionable if beneath the triviality there is deep and delicate intimacy of fellowship. But that has been lacking between us. So I formulate my need. I pray my reconstructive prayer: "God, every impulse of my nature is attuned to his, to learn of him and minister to his need. Every impulse of my nature is attuned to his,

to learn of him and minister to his need." These words alone do not constitute the prayer. Words alone never do constitute a prayer. But these words and the ideas they symbolize serve to reconstruct my personality and reorganize my impulses in such a way that I am more adequately adjusted to the divine order of my total environment in that respect which enables me to enter more deeply and readily into communion with my friend when I meet him again. Next day I find him and our converse is profoundly satisfying to both.

A few years ago I found myself involved in many activities. In addition to my regular college teaching I had taken charge of a small but rapidly growing church. We were planning the construction of a new building. Also I was teaching two courses in another college besides my own. Many different matters I had to keep on my mind. Appointments, committee meetings, schedules, plans, many requirements were heaped upon me. But I was an absent-minded college professor who always lost his jackknife and could never find his hat. A college professor in the ordinary round of his duties can be absent-minded without disaster, because he lives in a hothouse. The traffic of life does not greatly hustle and throng and threaten him. But I had stepped out into the jam of modern life. I was overwhelmed. I was lost unless I could remember innumerable details and keep a great number of things systematically in my mind. It was then that I discovered what great things can be accomplished by the exposure, diagnosis and reconstruction of prayer. "God, help me to remember everything instantly, the moment it is needed." The prayer was not in the words alone but in that reconstructed adjustment to the divine order whereby this order, which is God, could do the remembering for me. My prayer was answered. I never forgot a single engage-

ment or essential detail. I rose in a week to mastery of the total situation.

At this point I hear a protest. What you are describing is nothing but auto-suggestion! But wait a minute. There are two kinds of auto-suggestion. There is "nothing-but" auto-suggestion, and there is auto-suggestion with the "nothing-but" left out. What we have been describing is the latter. In the worship described we were not "praying to ourselves," if by prayer one understands not the words but that habitual attitude which the words enable us to establish. The words, and the idea they express, constitute the mental tool by which this habitual attitude of mind and total personality is shaped. The prayer is in the attitude, not in the words; and this attitude is not prayer to self, because it is an adaptation to that phase of our environment which will do our remembering for us, as air does our breathing for us. The environment, which is ultimately God, does the remembering or breathing or loving or communing when we make right adjustment. Prayer *is* this right adjustment.

The courage, the community, the love, the memory, the mastery, these are not in ourselves alone, but are brought to us by something in the environment. The problem is to find and establish that adjustment through which God can do this for us. Through worship this problem is solved. The prayer which God answers is not merely a prayer of words, but it is a prayer of total organic and mental adaptation to him. It consists preeminently of certain attitudes, but the prayer is in the attitude of the total personality, and not alone in the words. Consequently what we have described is not merely auto-suggestion. It is prayer to an objective environmental God, in which auto-suggestion may very well have some part to play, as it has in all our converse

with this world round about us. The part of auto-suggestion is to arouse and establish the prayer, the prayer being a certain personal attitude, or habit of response, which clamps the cable.

By this method of worship one can develop the various arts of effective living. Of course one cannot develop mutually exclusive arts. As William James has said, one cannot be "both a fat man and a lady killer" at the same time. But in acquiring all those habits which enter into a single system of living, worship enables the individual to reach down more deeply into his nature and reshape the secret impulses of the heart as nothing else can. Let us illustrate these arts of effective living by describing some of them and showing how they may be attained through worship by way of exposure, diagnosis and reconstruction.

The art of using time is one of the most important of all needs of effective living and every man who would live richly must master it. The reason so many do not rise above low mediocrity, and are driven about like driftwood until they are washed up on some shore where they lie until the grave is ready for them, is not so much because they lack native ability but because they never learn how to use time. And the problem grows ever more acute as life becomes more complex. The traffic of life becomes more congested all the while. An increasing number of diverse and trivial but insistent demands throngs upon every man as civilization matures. If one gets anywhere at all through this crowded field of tackling demands he must learn to dodge and jump and slither his way along like a halfback with a football. He must be a galloping ghost if he ever makes a touchdown through such a crowd. This is the art of using time.

Each moment is a pearl of great price. The art of

using time is to go and sell all that you possess in order that you may have it and use it to the best advantage. To acquire this art one must expose himself to the stimulus of God, thus awakening his aspiration and the deepest drive of his nature. In this state of personal awakening he must examine his habits and his manner of life to discover wherein he is at fault in his use of time. Having brought to light his precise need, he must formulate it in the most comprehensive and condensed manner possible. Then by repetition he can establish that mental attitude and that total organic set which is best adapted to make the most excellent use of every moment of time.

No one uses time aright who has not acquired the art of loafing. But it must be scientific loafing; and this can be achieved through worship. Masterful loafing consists in taking a little time in which one throws off every care, his mind filled with nothing else than idle fancies, his spirit become as a little child at play. It is half past four, or maybe five. He puts on his coat and hat and walks across the street and down Fullerton Avenue to the Lake Front. He sees how the gray of the water merges with the lavender and mauve and varied tints of the sky. And it may be, all silently across the distant margent of the lake, there glides a little launch, milk white in evening light. And in his mind there is nothing but the lilt of a song, or a snatch of poetry he never can forget, or a bit of Holy Writ. Or may be his lady love floats before him in a dream.

But perhaps at half past four it is raining. What of that? He puts on a rain coat if he has one, or an old suit, if he has not. And down at the Lake Front he watches the little raindrops fall into the gray rolling water. How they smile and gurgle as they snuggle down into the mothering breast of the big lake. Fancy free

and lilting light he swings along through the park and up the street until he gains his room again.

This is the art of loafing. One gains it through worship. To achieve it one must periodically expose the secret recesses of one's heart to the searching presence of God and by diagnosis bring to consciousness whatever hidden worries may be lurking there. And these, when they have been discovered, can be transformed into joy and hope by the prayer of reconstruction, after such exposure, and in the hour of relaxation: "God, quicken every cell of my body, and all the love of my heart, and every impulse of my flesh, to the creativity of beautiful forms of intellectual and artistic achievement." And this he will repeat until his whole nature spontaneously expresses itself in artistry when he goes forth to loaf.

Perhaps artists born, like Walt Whitman, for example, are by nature so made that in the idle hour they hear within themselves the sound of lyres and flutes. But most of us must reconstruct ourselves to achieve this spontaneous artistry of loafing. The hidden sources of idle fancy must be transformed, and this is the work of worship. These sources are deeper than consciousness, deeper than thought, deep-laid in the physiological processes of the organism. Worship reaches down a transforming hand to reshape these roots of our nature; for worship, we must remember, is a physiological process quite as much as a spiritual. In fact it can be profoundly spiritual only when it is deeply physiological. So it is that worship can make us anew and send us forth to loaf carefree and songfully.

There are many other arts of effective living which can be deep-laid within us and brought to high mastery through worship. There is the art of overcoming fear in all its forms. Almost everyone is beset with some fear or other. Generally the cause and nature of our most

disturbing fears are hidden from us, but they rise up to frustrate our efforts and throw us into confusion just when we need most of all our complete self-command. Through the exposure and diagnosis and reconstruction of worship these fears can be treated and cured.

There is the art of holding judgment in suspense without anxiety and worry. To hold judgment in suspense when dearest love and eager hope are involved, and do it without mental distress, is most difficult. But there can be no wisdom in the conduct of life without it. It is an art to be attained through worship. After diagnosis one must state his need in this respect, making his statement as complete and accurate as possible, and repeating it under those worshipful conditions described above.

There is the art of overcoming a sense of failure. When one's enterprise is wrecked he may creep back to his room crushed, his courage broken. But there is a method of worship by which one digs down to the deepest drives of his nature, awakens the ultimate passions of life through exposure to God, and so recovers the dauntless thrust of endeavor.

There is the art of mental concentration and of profound and accurate thinking. There is the art of open-mindedness, which must not be confused with the lack of all convictions. Indeed the open-minded person is the only one who can have well-established and well-tested convictions.

But the master art of them all is the art of worship itself, by which may be developed any specific ability within the limits of physiological possibility. And the limits of physiological possibility have never yet been found. One can worship for the sake of cultivating the art of worship itself. Much worship is of this kind.

Last of all there are two supreme requirements of a

general nature which must be met, else effective worship is impossible. One of them is honesty. One must be honest with oneself and with God. If a man loves self-complacency, or even self-respect, more than he loves the truth about himself, he cannot worship. Unless he is searchingly and pitilessly honest with himself and with God he cannot expose himself to the presence of God, he cannot diagnose himself and he cannot worshipfully reconstruct.

The second great requirement is to be definite, specific and accurate in diagnosis and in statement of need. This is difficult enough in itself, but it is made impossible for many people because they think that worship in private, which is the sort we have been describing, is the same as worship in public. The only notion of worship which some people ever have is what they get from worshiping in public or observing other people worship, which is necessarily always public. Even the worship of two people together is public in the sense in which we are now speaking. But most effective worship is always solitary, and in this matter of being definite, specific and accurate it is very different from all forms of public worship. In the presence of others it would be shocking and outrageous to be as intimate and personal as one must be in solitary worship. In the presence of others one must use conventional phrases, pious forms and generalities broad enough to include their thinking as well as one's own. But if the worshiper does not get beyond these conventional generalities and pious phrases in his private worship he will never accomplish anything. He must be precise and searching, cutting down to the roots of his nature, if he would worship effectively. And this requires solitude.

It takes time to learn how to worship. It takes years to acquire the art. One does not become a successful

musician in a day. One does not master the methods of high finance in a year. It requires half a lifetime. And it requires no less to master the much higher art of worship. But it is the most precious of all the arts, for it is the key to them all.

And we must remember that all arts acquired through worship, and all such habitual attitudes, are prayers. They are wings outstretched to catch the lifting winds of God. Worship is the way we develop such persistent prayers.

CHAPTER IV

Habits and the Perception of God

What we perceive is determined by our habits. The twofold problem of how to perceive God and how to make proper adjustment to him are both matters of habit formation. Hence habit has profound religious significance. No man has seen God at any time. But the reason is not because God is by nature imperceptible to those who have eyes to see. Rather it is because we do not have the required habits. The pure in heart shall see God. The clear and certain perception of God waits on the formation of the right habits. We shall see him as he is when we have acquired those habits which will enable us to distinguish those features of experience which most clearly and unmistakably indicate the presence and character of that Object which is of greatest value for all human living. Since habit determines perception, whatever apprehension we may have of him, or whatever we may lack, depends on our habits.

These requisite habits cannot be developed by the isolated individual apart from society. Hence a social process of development is required. Neither can he develop them without the needed knowledge, instruments and technique. Hence science is involved. We cannot attain these habits without aesthetic culture and objects which arouse and cultivate aesthetic appreciation. Therefore art and aesthetic culture are parts of the great undertaking. Our blindness to God, and the confusion of our dim, uncertain perceptions of the divine,

will lift and fade like a fog as our vision is clarified. This clarification involves, we have said, social organization, scientific technique, artistic achievement, aesthetic culture and the mutuality of love. But the whole process can be viewed as a problem of habit-formation.

These are some of the reasons why we say that religion cannot be separated from the problem of habits and their development. The discovery of the supreme religious object, God, is a gradual process and is being made as the right habits are formed. What habits will bring God to light, along with the requisite social organization, science and art, must be found by experimental living. But out of the long experimentation of the ages God slowly dawns upon the race. "They who do my will shall know the truth."

In popular thought habit is understood in too narrow a sense. It is limited to visible movements of limbs and trunk, such as swimming, skating, typing, driving the car, correct or incorrect use of language, loudness or softness in tone of voice, its modulation, etc., etc. But these perceptible habits are the least important. Every person has a vast system of imperceptible habits. They are habits of mental attitude; they have to do with the adjustment and readiness of the whole organism. Of course they are not absolutely imperceptible. It only requires more care and power of observation, or a longer period of observation, to detect them.

Habits form a hierarchy, some being higher than others in the sense that they initiate and regulate the others. Some of the imperceptible rule over the perceptible, and among the imperceptible some rule over others. For example, the habit of good will toward fellow men gives rise to the formation of many new habits and regulates the operation of many old ones. The habit of suspicion is regulative of many subordinate

activities. The habits of caution, of diligence, of taking thought before you act, are all regulative habits, both controlling and generating many subordinate units of behavior. In fact the best division of habits is not into the imperceptible and perceptible, but rather into the regulative-generative habits on the one hand, and the subordinate habits on the other.

Another common misunderstanding of habit is to think of it as a form of fixation and routine. There are habits which do thus bind one to a fixed routine. But that is not the fault of too much habit, but rather of too little habit. If one keeps on forming more and more habits, he plainly does not fall into a single rut. It is only when he stops forming new habits that he falls into a rut.

One of the best habits to form is the habit of forming habits in ever greater number. This is growth; this is progress. Growth depends upon forming this supremely generative, regulative habit. By forming new habits all the time and adding them to the old, the individual progressively increases the range and fulness of his interaction with the total environment. Thus he increases the abundance of his life. For example one can fall into the habit of always using the same words to express a certain sentiment; or one may develop the habit of always seeking new and better ways of expressing oneself. The latter is a simple case of the habit of forming habits, for every mode of verbal expression is a habit, and every time a new mode of expression is learned, a new verbal habit has been acquired. Of course this is only a very trivial phase or form of the great habit of forming habits. We use it to illustrate this progressive habit, not because of its importance, but because it is so simple and trivial as to be quickly stated and easily grasped.

Abundant and effective living requires the greatest possible number of habits of all kinds. But how about bad habits? Must they not be excluded? We cannot answer until we know what is meant by bad habits.

A bad habit is one which, if formed, would in the end make the total number of habits less than if that particular habit never had been formed. To form the habit of taking poison, for instance, is bad, because the total number of habits in the end will be less than if it had not been formed. This is very plain in case of large doses of strychnine or arsenic; but it also applies to those poisonous drugs which show their effects more slowly, such as opium, heroin, and alcoholic beverages. The habit of lying and murder and stealing are bad because the total number of habits mankind can acquire will be less than if habits of honesty and mutual helpfulness are developed. So we can still say that the greatest possible number of habits should be formed. To say that bad habits should be avoided is the same as saying that no habit should be formed which prevents us from acquiring the greatest possible number. Some habits block the way to the maximum; others lead on to the greatest multiplicity and variety. Only the last should be cultivated.

Spiritual growth, if it is to continue beyond the stage of biological development, depends upon the habit of forming habits. This is an imperceptible regulative habit inasmuch as it is an habitual mental attitude of alertness and readiness for novel response. Thus one may form the habit of spiritual growth and never cease to grow while life lasts.

With this enlarged concept of habit let us see how habits shape our perceptions. Two men approximately in the same situation may perceive very different things. One may discern the contour of the land and be wholly

oblivious to the kind of insects which lives in the region. Another may note the dress and dialect of the people but be quite unable to perceive the type of architecture, even though he tried. One may see the marks of ancient glaciers in the hills and valleys, but the other be blind to these signs and be unable to discover them even if he looked for them, because he has not formed the requisite habits needed for such perception. Habit determines that attentiveness to the needs and feelings of others which enables one person to perceive the thought and purpose and changing mood of his associates while another is totally ignorant of the same. All perception depends upon habit and without the requisite habit one can perceive nothing.

Every man's world is at least slightly different from any other's because of difference in habits, and some perceived worlds are vastly different because of diverse habits. These greater differences between perceived worlds do not appear until we compare men of different cultures. Suppose we could put side by side the world as perceived by the primitive savage, the ancient Greek, the man of the Middle Age and a modern European. The four worlds would differ to such an extent that one could scarcely believe they pertained to the same planet. The difference would be due chiefly to the fact that each selected from the totality of his experience different elements for attentive consideration and used these elements in a different way. In other words, their diverse interests cause them to select different features for the focus of attention and to render these features diversely significant. Diversity of interest is simply another word for diversity of habit.

To go deeper still into this profound diversity of perceived worlds brought about through the selectiveness of habit, let us take the example of perceiving a penny.

A penny, we say, is reddish brown, round and flat. But a penny presents many different shapes and colors according to the different angles and distances from which we view it and the different lights in which it is placed. Viewed in one way it presents only a thin, straight edge; in another way it becomes an oval, enlarging to a circle as it is turned. So also the apparent size of the coin varies according to its distance, the size of neighboring objects, the standard of comparison, etc. Also the color changes as the light varies. As we hold it in many different ways and move it about over different portions of the body, the feeling of it changes, not only from cool to warm, but from rough to smooth, from sharp and painful to soft and pleasant, from the feeling of being small to the feeling of being large. But it is not correct to say the penny has many different sizes and shapes and colors and feelings, as though they were distinct and separate from one another. They are not distinct and separate. They are continuous with one another; they flow into one total vast complex and ever-changing experience. If we keep the eyes fixed upon the coin and change our position, approaching, receding and moving about, we see that these shapes are continuous with one another. It is one shape in constant process of change. The same is true of the color. The penny always has some color but it is ever changing. The same is true of the tactual feeling. It is a changing feeling, continuous and infinite in its variation, not a number of distinct separate feelings, except as we separate ourselves from the penny for a time and then return to it.

When we thus take note of our total experience of the penny we see it is a vast, panoramic, kaleidoscopic, massive experience reaching us in wide regions of space

and time, with innumerable qualities interfused but all flowing together to make one continuous total datum. Our experience of the penny is a multiform experience. But the wealth and complexity of it we have not yet fathomed. Let us go more deeply into this ocean of experience that pertains to the penny.

We have spoken of the light by which we see the penny. But the light is also our experience of the sun. We have spoken of the position of the penny. But the penny holds its position by reason of the gravitational field of the earth and many other bodies, and so, in experiencing its position, we are also experiencing all these other bodies. And furthermore, our experience of the penny involves our own organism. We are experiencing our own bodies in experiencing it, for they also enter as constituents into the total situation experienced. And so we could go on and on, uncovering further depths and riches, immeasurable and illimitable, all pertaining to the penny.

We do not mean to say that we perceive all this when we look at a penny. On the contrary we mean quite the opposite. We have mentioned all this with the deliberate purpose of contrasting it with what we do perceive. When we speak of a penny we do not mean all this wealth of experience which pertains to it. It is precisely all this which we most carefully exclude from consideration when we perceive a penny. When we see a penny we select only a tiny bit from all the experience that pertains to it. All the rest enters our awareness only to that minimum degree necessary to signify the tiny bit we have selected as distinguishing the penny. And what is this tiny bit? It is an interaction between organism and environment involving a certain specific organic set on the one hand, and a cer-

tain object in the environment which we characterize as round, flat on two sides, reddish-brown, etc., on the other.

Our whole point is simply this: A tiny bit of qualified space-time has been selected by our habits from the infinite fulness and expanse of our total experience; and this tiny bit constitutes what we call the penny. And this tiny bit we select from all the rest because of our habits. One with different habits would select something else from this totality and thus his world would be different.

The bits of experience which you and I may have selected as most significant, and which constitute for us the flat reddish-brown penny, are not one whit more real than the whitish color the penny sometimes assumes, or the oval shape, or any other portion of the whole totality of experience which pertains to the penny. All parts of this total experience are equally real. But all are not equally significant because of the way our habits select and give significance to certain parts and not to others. The metaphysical standing of the round, flat, reddish-brown object is not one bit higher than the whitish oval object or the thin straight edge or the innumerable other objects which might be carved out of this total experience by a different set of habits. When another experienced what we call the roundness he might not perceive it as round because it would be significant to him only as it indicated the presence of an oval object. He who perceives only the straight edge of the penny would find any other angle engaging his attention only insofar as it indicated the presence and value of this straight edge.

What are some of those habits which make the ordinary man perceive the penny as a flat, reddish-brown, hard, cool, small object instead of an oval, or straight

thin edge, pink or white, soft or melting, hot and large? For the penny may be all of these. Let us note a few of the habits which shape our ordinary perception of the penny.

Our finger and thumb are so made that we can hold the penny securely only when we grasp its flat sides between thumb and finger. Hence practical considerations cause us to attend to the flat sides. Also we can grasp it only when it is in arm's reach. Consequently we perceive the penny as bearing that appearance it presents when in arm's reach. All its other sizes and shapes and colors can engage our attention only insofar as they signify this one most practically valuable aspect, and help us to get where we can make use of it. Pennies ordinarily have no interest unless we can grasp them or imagine ourselves doing so. They are there to be grasped, if not now, then at some future time. Otherwise they have no existence for us. This is due to the grasping habit which characterizes ordinary human nature. Thus we carve from out of our total experience of the penny that infinitesimal portion which is most directly helpful in enabling us to grasp it. All the rest we ignore, except as indicative of this important portion. Our habits cause this tiny portion to tower over all the rest.

This study of the penny may help us to get some slight notion of how immeasurably numerous and diverse are the different worlds we might perceive if our habits were different. It shows that the world we perceive has been selected and shaped by our habits. The world in which we live is only one of many worlds in which we might have lived if our habits had been different.

This peculiar world which each man occupies, slightly different or greatly different from that of any other man's world, must not be thought to be due to difference

in the immediate experience each person undergoes. It is true that the immediate experience of each is slightly different from every other because no two bodies can occupy the same place at the same time. Consequently the color and shape and sound and feel of things as I experience them will never be the same as another undergoes. But this difference is not great, and in any case has no practical importance. For we have already seen that the greater part of this immediate experience never enters into our consciousness at all. What we perceive is not experience in its fulness. What we perceive is only that tiny bit of experience which has most practical significance for us. Consequently we shall perceive the same world any other man perceives who has the same practical interests as we. All having the same habits will perceive the same world; but people having different habits will perceive different worlds. The world we perceive, with its penny and tree and hill and river and sky and earth and fellow man and city and nation and institution and God, is one world out of many that might have been selected. And we select the one we do, because of the habitual interests which shape our perceptions.

The clear perception of what is of greatest value in our total environment, and hence is God, can come only when we form those habits which will enable us to perceive it. The pure in heart, who shall see God, are they who shall have such habits.

Sense experience is not itself perception; but all perception requires sense experience as one factor. We cannot perceive the penny unless we have some sense experience of it. On the other hand, however, we cannot perceive it even with the sense experience if we have not the requisite habits. A savage might not know it was a penny and hence pay no attention to it, although

it might touch him or pass within the range of his vision. In the same way we might be unable to perceive the track of the deer, which to the savage was so plain and unmistakable that it seems fairly to strike him in the face. All perception involves sense experience, but having the experience does not insure that we shall perceive what is experienced. We must learn to perceive the roundness of the earth when the signs of this shape strike our senses. For thousands of years men never perceived it, although the signs were sensuously experienced by them, however unperceived. They could not take note of these signs until they had formed the habits which would enable them to do so. Only the trained and disciplined scientist is able to perceive through the senses the presence and character of electrons. It is often said that electrons are too small to be perceived, even through the most powerful microscope. In a sense that is true. But there are certain phenomena of sense which indicate to the trained physicist all that he can legitimately claim to know about the electron or the atom or the inner structure of the earth or the weight of the sun, or anything else. He does then have sensuous experience of these objects, even as we have sensuous experience of pennies. If a scientist develops habits which enable him to react to the laboratory signs of an electron with the same automatic and precise discrimination that we react to the signs of a penny, then the scientist perceives the electron as we perceive the penny. We must have sense experience of God, at least after the fashion in which we experience the roundness of the earth, the structure of the atom and the weight of the sun. We perceive these things in one sense of perceiving. We undergo experiences which, to a trained observer, indicate the presence and character of these objects as certainly as other sense

experiences indicate the presence and character of tree or stone. But we cannot distinguish the forms of experience which render God perceptible unless we have the habits which will enable us to do so. This is as true for discerning tree and stone as it is for perceiving God or the atom or the chemical ingredients of the sun. The only difference is that in case of tree and stone most humans have lived in an environment which has caused them to develop the requisite habits, while in case of atom and sun only a few specialists have done so. If God affects our senses in any way we shall be able to perceive him when we have formed the necessary habits.

Does God affect our senses? We scarcely see how anyone can deny it. The weight of the sun affects our senses, and so does the atom, and so do the chemical components of the remote stars. Otherwise we could never know these objects existed. Surely any object that sustains human life must affect our senses. Since God is that something that sustains human life he sustains the senses and hence affects the senses. For who will deny that the senses are a part of human life? But anything that affects the senses is an object that may be perceived when men learn to note and interpret its sensuous effect. Hence God is an object to be perceived through sense experience. We do not mean that he must necessarily have a certain spatial magnitude. We do not mean that we must be able to rub our hands against him any more than we can rub our hands against an atom or one of the remote stars. But we do mean that there must be ways of apprehending sense experience which would reveal to a competent observer the presence and character of that Something upon which human life is ultimately dependent for its maximum security and abundance. When this way of apprehending becomes established as a form of habitual reaction

rendered accurate through experimental tests, we perceive God.

In the manner indicated, then, God is an object to be perceived through sense experience. But such perception must have all degrees of vagueness and uncertainty, of clarity and certainty, according to the habits which shape our perception. Are there any men on earth with habits so formed that they can discern the presence and character of God with clearness and infallibility? We doubt it. Perhaps many men perceive God more or less vaguely at times, but they are also subject to illusions even more than in the perception of trees. But the clear and certain and constant perception of God through sense experience is something which is progressively attainable, because God does affect our senses.

However, many men who truly perceive God are not aware that they do so through the senses. In fact they are often most emphatic in denying any sensuous element in their perception of him. But this is a common error, not only with respect to God. Men have frequently claimed that they discerned other objects besides God through some telepathic or non-sensuous medium. For example, I may discern the thought of my friend without knowing how I do it. It may seem that I do so without help of any sense experience. But careful examination generally reveals that subtle and complex sense experiences are involved. There has been a slight pressure of the hand or a quick catch of the breath or a fleeting change of the face which, added to many other experiences, enables me to discover the thought of the other. There are expert cooks who do not know they are guided by sense experience in preparing their concoctions. They seem to do it by some mysterious intuition. So with many other kinds of discernment and skill. But in all these cases

more careful examination shows that sense provides data for guidance and perception. Such also is the case with mysticism. The mystic may think that sense has nothing to do with his experience. But the latest and best studies of mysticism, preëminently that of Leuba, show that sense has a very great deal to do with it. So also with any other discernment of God which may be possible. Sense experience must always provide the medium, for without it there can be no knowledge of environmental objects.

If ever men perceive God it must be through the senses, for that is the only way that perception can occur. Many men even now perceive him more or less confusedly and uncertainly and inconstantly, even though they are quite ignorant that it is through the senses that they do it. But this perception will grow in clarity and certainty and constancy as better habits are formed. All progress could be measured by the degree to which men approximate a correct perception of God through development of required habits.

CHAPTER V

How We Are Remade

We have seen a part of what our habits do for us. They make the world we live in. They determine, from all that we experience, what shall constitute the object of our response. The world with which we interact is selected and fashioned by our habits.

But our habits do more than determine our perceptions. They also determine what we shall enjoy and what we shall dislike. If we like one kind of food better than another it is not altogether because our innate constitution demands that kind of food. The married man may be very sure that his mother's cooking was best, absolutely and from the standpoint of eternity. But he is mistaken. He likes his mother's cooking simply because his early habits of childhood were shaped to find satisfaction in that kind of food. And the same is true of everything else in which we find satisfaction. We prefer the dress of the modern and think the hoop skirts and tiny bobbing bonnet of other days absurd if not positively ugly. But it is all a matter of habit. We think that the stuffy and sheltered existence of our civilization, with is furnace-heated houses, its closed cars and its warm baths, is a very comfortable mode of living. But the "he-man of the wide open spaces" (if there be any such creatures), and primitive men generally, accustomed to the open sky, woods and winds, would find it quite intolerable. So also the books we enjoy, the associates we like to have, the friends, the social customs,

the aesthetic objects, the work and the play that give us joy, all these and innumerable other things which satisfy us are satisfying because of the habits we have formed.

So we say our world of joys and sorrows, of satisfactions and deprivations, is a world partly created and partly selected by our habits. We shall find satisfaction in this kind of work, in this kind of social group, in this or that kind of social process, in this work of art or aspect of nature, in this or that constructed portion of the world, according as our habits have been formed to find joy in such things or the opposite. One can sleep comfortably on the points of spikes if his habits have been diligently shaped aright, as the well-known historic instance testifies.

Personality is also a product of habit-formation. We are using personality, now, in the popular, superficial sense of the word which refers to the quality and degree of social charm one may exercise. We shall use the word individuality to designate the more fundamental traits of character and selfhood. Personality refers to tone of voice, grace of manner, personal appearance—the total superficial impression that a person makes upon his associates when first he meets them. It is plain that personality in this sense is the product of habit-formation; although it is equally true that some people can develop a pleasing personality with far less labor than others. Early training on the one hand, and native physiological endowment on the other, make a great difference. The early training is, of course, identical with habit-formation. The physiological equipment may be given at birth, but what is made out of it for a pleasing or displeasing personality depends upon habit.

We cannot discuss in detail all the different features that enter into either personality or individuality and

show how they arise from habits. Such matters as the kind of language we use, its elegance, precision and grammatical accuracy, the courtesy we display, the moral character, etc., etc., all these are plainly due to habits.

Individuality, we have said, is more fundamental than personality. It is that which we truly are, not merely the impression we make on others. What we call the self, in the deepest sense, is precisely a system of habits. This system may be more or less complex. It may be more or less harmonious and well organized. It may have more or less fundamental conflicts in its organization. It may have deeper and deeper levels of organization, ranging from the habits which consist of overt movements of trunk and limbs down to those persistent adjustments of the whole organism which constitute our total life purpose, if we have one or ever will have. But self, the individuality, is not something "back of" these habits; it is these habits as a process of interaction between organism and environment.

Habit-formation, then, is both world-building and self-building. It makes for us the world we shall perceive; it makes whatever satisfaction or dissatisfaction we shall find in the world; it makes our personality; and it makes us ourselves in whatsoever fundamental sense we can be called selves or individuals. We achieve selfhood, we achieve individuality, according as we form habits.

The soul we have at birth is whatsoever organization of habits we have at that time; and of course we have even then a very complex system of organized behavior. That system of organized habits found at birth is a soul, a bearer of spiritual life, as the beasts are not, because it has capacity for indefinite development providing it is placed in a favorable environment. Through interaction with the right kind of environment it can grow into

ever more abundant life. Therein lies the feature which makes it a soul.

The human forms habits accidentally, like any other animal. Insofar as he does this he has no control over his own fate, for his habits determine what his fate shall be. But humans may, and sometimes do, form their habits by deliberate intent. It is doubtful whether any other animal ever does this. Certainly none other does it to the degree that man may do. He may decide beforehand what sort of habits he would have and then deliberately acquire those habits. If he is wise in his choice of habits, and uses the right methods in cultivating them, he may make out of himself and his world almost anything he can intelligently desire.

Religion has a twofold part to play in habit-formation. It gives one that profound, earnest, comprehensive and critical survey of the greatest needs of life, which is required in order to choose wisely what habits to cultivate. And then it adds a self-surrender, a devotion and enthusiasm, which renders the methods of cultivating habit exceedingly more effective.

We are forming habits all the time, whether we will or no. Every time we study a lesson, every time we walk across the street, every time we speak to another, we are forming habits. Habit-forming is something from which we cannot escape. There is no vacation to be had so far as it is concerned. No recording angel could keep a more complete and accurate account of all we do, and bring us to judgment more infallibly, than our habits, as James has said. We may think that we can undertake some desirable mode of conduct when time and circumstances require and in the meantime do as we please. After we get out of college and are given some important work to do, then we shall use our minds to the utmost; or when we are in the presence of those

whom we desire to please we shall be gracious or prompt or accurate; or when we are in a situation where the stakes are big we shall do what we can do; or when we have enjoyed ourselves a little longer we shall cease certain slovenly or wasteful or otherwise undesirable practices. But in the meantime the habits are forming. And we shall never be able to do or be what might have been had we begun to build up the right habits from the start.

How to form the habits we want is a twofold problem. We must discover what habits are best to form and then we must discover what methods can be used to form them. Let us first consider the methods. Psychologists have rightfully given a good deal of attention to best methods for forming habits. We do not need to enlarge upon the matter here but shall briefly review a few suggestions which may be found in various books on psychology and education.

Habits that involve movements of trunk and limbs can be acquired by repeating the physical movements until speed and accuracy are attained and the whole process becomes more or less automatic. But we have already seen that such habits are not the most important. Habits of mental attitude are not so easy to attain. Furthermore, these habits of large physical movement are dependent upon mental attitude. The skill with which we work our typewriter or play golf or handle our car will be greatly affected by our mental attitude at the time, no matter how well formed the subordinate operations may be. Because of this greater importance of the habits of mental attitude we shall have them chiefly in mind in discussing methods of habit-formation. However, the two kinds of habits cannot be separated and methods applicable to one are ordinarily applicable to the other also.

No habit should be "broken" without putting another in its place. As a matter of fact it is impossible to get rid of a habit merely by casting it out. Whenever we overcome an undesirable habit it is always and only by the building up of a contrary habit. Therefore, in fighting a bad habit attention should be given to the new habit that is being developed, not to the old habit which is being changed. Always this constructive, positive, affirmative attitude should be maintained toward habit-formation; never the merely destructive, negative attitude. It is impossible to empty ourselves of habits. The very effort to cast off a habit is itself a positive building up of a counter habit. Hence our attention and energies must always be given to the constructive work of habit-building, even when engaged in destroying an old habit.

In forming any habit, whether it be a counter-habit such as we have just been discussing, or some other habit supplementary to those we already have, we should in so far as possible burn our bridges behind us. We should put ourselves in a position where it is impossible to go back, if conditions can be so arranged. This is the value of a public avowal. If we publicly commit ourselves to some new way of life, we are sustained in our new position by the expectation of others and by the shame and ridicule which would be ours if we fail. Besides public avowal other things can be done, depending upon the nature of the new habit and the conditions involved, to sustain if not to compel us to keep the new resolve. If we do not thus go as far as we can in committing ourselves to the new habit, we are not sincere and whole-hearted in the undertaking. And we are not likely to succeed until we are whole-hearted.

Often a change of physical environment is necessary before we can carry out a new habit. But even when

not required it is almost always a great help. The old environment has with it the old associations. A new environment frees us to some degree of the constant suggestiveness of these old associations which tend to keep the old habits dominant and prevent new habits from developing.

Nothing can help us more in building up a habit, especially a total system of new habits, than to associate with the people who have the desired habits. We soak up habits from those about us. We shall find ourselves almost inevitably adopting certain phrases and mannerisms, certain customs and mental attitudes, from our new social environment. We will not necessarily conform altogether to the habits of our associates, but we cannot escape their powerful influence. In fact we can say that if we are to be successful in developing any very extensive change of habit, either one of two things is necessary. Either we must find a congenial social group or we must create one. If I create a congenial group I induce others to develop the habits I am forming. Growth of life is impossible without the help of associates. They may lead me or may follow me, but in some way I must have them with me if I am to make any extensive growth in the formation of habits.

Of late years a certain method of habit-formation has been rendered widely popular and at the same time ridiculous, as the wide popularization of any new method is likely to become ridiculous. We refer to the method of auto-suggestion. But the quackery and absurdity that has been associated with auto-suggestion should not blind us to its intrinsic worth.

There can be no question of the fact of suggestion. It does certainly occur and occurs constantly. No one can escape its influence, whether it be the suggestion

practiced upon us by others or the suggestion practiced by ourselves upon ourselves. We constantly suggest things to ourselves, whether we intend to do it or not. And others are constantly suggesting things to us in such a way as to control our thought and conduct. Almost all advertising is based upon suggestion. The great profits of heavy advertisers prove the efficacy of suggestion.

Now there are unquestionably great dangers and actual evils involved in the practice of suggestion, both auto-suggestion and alter-suggestion. The evil is that we may be induced to think and act in one way or another without reflective consideration and deliberate decision concerning the merits of the course we thus follow. This is the great evil of advertising. Advertising as a means of imparting information is good, if it is not too costly and there is no more economical way of giving the desired information. But advertising that drugs the mind with the force of suggestion so that we buy a certain commodity regardless of its merit, simply because it has been dinned into our ears and flaunted before our eyes until we can think of nothing else, is bad. What we have said of the evil of suggestion in advertising is the evil of suggestion everywhere. If we blindly run through some rigmarole of auto-suggestion until our judgment is stupefied and we become incapable of discerning the plain facts about ourselves and environment, then auto-suggestion is a very great evil. It becomes like a drug. It is destructive of intelligence.

This comparison between auto-suggestion and the use of drugs can be carried out a little further without overworking it. Drugs are exceedingly harmful when used without intelligence. But in their proper place, and used with care, they may be of very great help. So

also with auto-suggestion. In emergencies suggestion may be the only way to induce a great mass of people to act together, although even then the loss is often greater than the gain. But when we come to auto-suggestion we believe there are occasions, if it is properly applied, when it is highly useful. When a man has reflectively surveyed the total situation with utmost care, has clearly faced all the facts both concerning himself and other maters, and in the light of this survey has deliberately reached the conclusion that a certain difficult and subtle habit is desired, then he may use auto-suggestion judiciously with the utmost benefits. Auto-suggestion then becomes like manual practice on a typewriter, for example. There is something stupefying about the continuous repetition of certain movements, and yet there is no other way of mastering the art. So likewise there is something stupefying about auto-suggestion, but one can choose those times when he must be stupid in any case, such as times just before going to sleep and immediately after awaking. The worshipful use of auto-suggestion has already been described (see Chapter III).

We must remember that we cannot escape auto-suggestion if we try. The thoughts that constantly recur to us, especially those that happen to run through our minds at those suggestible times of near-sleep, are cases of auto-suggestion whether we wish them to be so or not. These thoughts are always suggesting some habitual mental attitude and course of action. Such being the case it is plainly the part of wisdom to control this inevitable process of auto-suggestion and turn it to good account by the exercise of intelligence, instead of allowing it to run its course without regard to what it may produce of good or ill. In this sense, then, and

under these conditions, auto-suggestion is an exceedingly valuable method for developing certain desired and deliberately selected habits.

It should be borne in mind that auto-suggestion used as a means of developing habits deliberately chosen as desirable is a wholly different matter from that drugging of intelligence which is involved in most other cases of suggestion. As a substitute for intelligence and as a means of blinding the vision to facts, suggestion, whether auto- or alter-suggestion, is one of the worst of evils. But as an instrument of intelligence used for hammering subtle and complex habits into conformity with some chosen way of life, it is a great good.

Closely allied with auto-suggestion is prayer as a means of shaping habits. Prayer for some improvement in oneself is auto-suggestion plus the attitude of religion. Prayer for some needed power or aptitude is auto-suggestion, but it is auto-suggestion with two qualifications. First, the power or aptitude which is sought is one which is desired only on condition that it is an improved adjustment to that order of the environment called God; and we endeavor to acquire it only after we have surveyed the total situation to the best of our ability and deliberately decided that this is the best adjustment to God and hence will promote the largest life for all. This searching of the total situation and groping after the kind of habit best fitted to serve this greatest good is worship, and it is a necessary preliminary to any specific prayerful request. Religious people sometimes call it waiting on God. This attitude of searching, groping, waiting, hearkening, adoring, is also an attitude of self-surrender and total self-commitment to that Something which is God. This self-surrender to God is the second characteristic which must be added to auto-suggestion to make it prayer.

Here, then, we have the two qualifications which must be added to auto-suggestion to make it religious. First, the suggested habit must be one which is sought only because it seems to be best fitted to adapt human life to that supreme condition of human welfare which is God. Second, we refuse to make up our mind concerning the value of any particular habit as serving this end of most abundant living until we have carefully and deliberately put ourselves in the attitude of complete self-commitment and devotion to God.

Now this attitude of self-surrender, in which one takes all his preconceptions, all his dearest plans and hopes, and casts them into the balance to be weighed and, if found wanting, cast aside for the sake of adaptation to God, is worship. In worship our steel weapons are cast into the crucible of flaming devotion to that imperfectly defined object called God, there to be rendered soft and malleable again and refashioned to a better design. This is that attitude of self-commitment which is a necessary part of all worship and an indispensable preliminary to all prayer.

Now auto-suggestion can become prayer, we say, only when it is preceded by this attitude of adoration and self-commitment. After this season of waiting on God, which is a time of quiet searching to know wherein one's habits may be improved, there may arise some idea of a desired change in habits. It is then that auto-suggestion may be used as a means of developing this desired new habit. The auto-suggestion practiced in this way is a form of prayer. It is a religious practice.

Religion can be put into auto-suggestion just as much as it can be put into friendship or ditch-digging or the giving of a cup of cold water. When auto-suggestion becomes religious it becomes allied with that powerful vital urge of aspiration and that profound critical recon-

struction of life which genuine religion always brings. Just as religion may be joined with social organization, thinking, art and morality for the good of all of these and of religion, so it may also be joined with auto-suggestion.

By auto-suggestion certain impulses are repeatedly stimulated and so become stabilized as permanent habits. Like all stabilized habits they then operate and control the organism whether they are being thought of or not. Since physiological processes sustaining health are habits more or less controllable through auto-suggestion, one may cure or prevent certain ills of the body in this way. For example, the person who is timid and nervous in certain situations may use the formula: I am calm and gracious and smooth of speech and easy in all my bearing.

Auto-suggestion allied with religion and carefully guarded from misuse may be a powerful instrument in building up those habits which are adapted to God. By means of it one may reconstruct his character, build up a desired personality, change his mental disposition and improve his health. But the dangers and evils of auto-suggestion are as great as its possible benefits. Auto-suggestion must be made religious if its evils are to be escaped and its goods attained.

CHAPTER VI

How Religion Cures Human Ill

Human nature is God-bent. It is also hell-bent, and for the same reason. It is plain that all sorts of maladjustments and perversion may arise in behavior which includes such a throng of unorganized and newly rising responses as the growing life of man requires. Man would not persistently strive toward a fuller life, and so be religious, if he did not have this surplusage of responses which may produce all sorts of trouble. The lower animals are not afflicted in this way—nor so glorified. Their chance for gain and loss is not nearly so great.

This ill of frustration and conflict due to multiplication of responses has been called sin. It is failure to make that adaptation to God which the growing life requires. If one continues to grow in the sense of multiplying his responses and striving to fulfil them, but does not make adaptation to that supreme condition of growth, he suffers the fall of Icarus. Human nature ventures into a way of life which only God can sustain. Hence when man misses God he is lost. This follows from our definition of God. The vast and awful experiment of human living and human history has tremendous alternatives at stake which can be expressed only by such terms as heaven and hell. Those religions, or pseudo-religions, which recognize nothing to be symbolized by heaven and hell, are drugged with sweet pacifiers and soothing syrups until they cannot see the facts.

This ill that results from failure to make the needed adjustment to God which the growing life requires has many symptoms. It may show itself in loss of courage, in mental gloom, in worry and nervousness, in undue excitability, in exaggerated irritability, in an extreme affectation of vanity to cover up from oneself and others an inner sense of insufficiency. Much inefficiency and blundering come from this disturbance of mind and character. Adjustments that could have been made fail to be made because of this breakdown. The ill sometimes shows itself in lying and stealing, in all manner of vice and crime. Or again, the unhappy victim shrinks from reality. He is afraid. He is afraid, perhaps, to meet people, or to make friends with people, or to undertake a new enterprise, or to assume responsibility, or to venture into any new field. He is afraid to exercise command. He is afraid to love. In extreme cases this ill produces mental disorders that are properly listed under the head of insanity. That human trait which makes men strive toward interaction with a larger and fuller environment makes them go mad when they miss it.

All these ills that result from failure to make proper adjustment to the supreme conditions of a growing life can be summed up under three heads—mental misery, wrongdoing and impoverished life.

This ill peculiar to man arises out of failure to organize aright an ever more complex system of responses in adaptation to a wider and fuller environment. When he shrinks back, when he refuses to face or fails to solve these problems, he incurs this malady of mind and character. When he fails to make the required adjustments he frustrates the chief drive of human nature and thus brings on the suppression or perversion of that surplusage of responses which is the distinctive trait of human

nature and the source of this peculiar striving for interaction with more and more of the world in which he lives. The classical example of refusal to make the required readjustments for interaction with a larger world, and the consequent suppression or perversion of this surplusage of response, is the rich young ruler who refused to follow Jesus when the latter said to him, "Go, sell all that you have . . . and follow me."

A few illustrations from modern life may be of value to show what we mean by situations which yield a larger life when properly met, but which bring on this chronic ill if they are not.

When a young man or woman leaves home to enter business or college he must make a rather radical change in his habits. He is impelled to leave home by that surplusage of responses which we have described. He may not even go so far as to leave home but may shrink from the venture and thus incur the ill which we are studying. But if he does venture forth he enters an environment which requires a readjustment of his old habits. This is one of those difficult situations, those problems of life which lead to "sin," or a larger life, according as one adjusts himself. Psychiatrists, in their study of mental ills, trace back many troubles to failure in meeting just such a change of circumstances as this.

When we make some new friend, entering into intimate personal relations with him, especially when we fall in love, we must adjust ourselves to a radically new situation. Every person is different from every other, and the more intimate the relations, the more prominent this difference becomes. We must adapt ourselves to a unique personality, and this is always one of the most difficult problems of life. Nothing yields greater returns in the way of abundant living than this. But nothing is

more difficult and delicate. Hence this is one of the most prolific sources of that illness of mind and character which the psychiatrist studies. When we fail to make the required adjustment, any one or more of the three symptoms of the human ill is likely to make its appearance: social wrongdoing; mental misery in the form of discouragement, worry, loss of confidence, nervous disorders of all kinds; or else withdrawal from life, narrowness, selfishness, meanness, misanthropy, callousness, insensitivity to all the lures that beckon on to fuller experiences. Any or all of these may be the results of "disappointment in love."

Always, in following the lure of a larger life, one is called upon to change his old familiar ways. His old habits no longer suffice. He must adjust himself to a new situation. Will he go forward, assume the new responsibilities, face the new conditions, wrench himself free from old habits; or will he not? Here is that dangerous opportunity which will fulfil the urge of man toward scope and fulness of life if it is rightly met; but which will throw him back into the slough of mental and moral disaster if it is not.

When a near relative or other dear friend dies one must build up a new manner of living. The habits adapted to the long and intimate association can no longer function. They must be recast. One must change his manner of thinking, feeling, conducting his life generally. He must fit himself into a world made strangely different by the absence of the loved one. Here again the illness threatens unless there is some adequate preventive or cure. Mental misery or impoverished life or social wrongdoing, the three forms of man's peculiar ill, will ensue if he is not "saved."

When the ambition of years, possibly of a lifetime, comes to nothing, we have another such problem. One

must find something else to live for, else the demon will overtake him. Here again opens up a larger life or chronic illness of soul. Case studies of the psychiatrist and sociologist have much to tell us of such "cases."

When some accident befalls, as, for instance, to take a true case, when a workman returns home and finds that an explosion has killed his wife and three children, he enters the house sane but comes out of it a raving maniac. He had to readjust himself to a world that was suddenly and terribly different, but he could not make the adjustment.

The illustrations, which we have given at some length, serve to show the great number and variety of those situations to which surplus responses must be adapted; right adjustment leading on to interaction with a larger environment; wrong adjustment bringing on the great ill of man.

Religion has always claimed to be the preventive or cure for this chief ill of human nature. It has stood as a preventive in the sense that it has so equipped man that he could adjust himself to the situation in such a way as to escape the threefold evil of social wrongdoing, mental misery and impoverishment of life. Even the earliest of religions have stood, in their own crude way, for such prevention or cure. And they have always been cherished by men, when cherished at all, as help in his attempt to make adjustment to sudden changes of fortune and difficult circumstances. When the sudden flood came down upon the camp, or the beloved child died, or marriage was undertaken, or some uncertain enterprise begun, early man turned to his God or gods for help to meet the situation, either by mastering it in such a way as to attain the greater good of interaction with fuller environment or by accepting failure in such a way as to escape the great illness of frustration.

To know how to accept failure is quite as important as to be equipped for mastery. For some undertakings in every man's life must certainly fail. As Janet, the chief of psychiatrists, says, nothing is more important than capacity for resignation; for it is plain we cannot always be successful. He has found in his studies that one of the most common causes for mental ill is inability to accept a defeat, to give up, to call it done. The constant, futile, ever-recurring attempt to do the impossible drives men mad. Let us use one of his own illustrations.

> I have just received a disagreeable letter which demands an answer that is quite difficult and painful to write. I think about writing this answer and I compose it almost completely in my imagination, but I have not the courage to write it down immediately and I leave the letter that I have received on my desk. Henceforth it is impossible for me to seat myself at this table, to pass before it, even to enter the room without seeing the letter, without being conscious of its presence and without recommencing a hundred times the effort to formulate the answer. At the beginning this answer would have been written in ten minutes. If I add up all the minutes for composing it in imagination, all the unfruitful attempts, and all the resulting emotions, I have spent hours of painful work in not writing this answer, and it will not be surprising if after several days I declare myself to be tired out by this wretched letter that I have not written.[1]

The misery is due to nervous exhaustion, and this exhaustion is due to repeated futile attempts to meet a situation. All worry is of this kind. Even if we have met the situation successfully so far as outward condi-

[1] Pierre Janet, *Principles of Psychotherapy*, pp. 193-194.

tions are concerned, if we continue to worry about it, it is because we keep on working with the problem in a futile sort of way. Worry is a futile struggle to adjust surplus responses to some larger situation than that of routine habit.

Because of the strain and worry involved in making these difficult adjustments, people may avoid all ways of life which are likely to present them with new or complex problems. But to shrink from such problems is to impoverish one's life. Never to expose oneself to trial and danger is to live a mean and meager life. This impoverishment may be only occasional, due to a temporary shrinking from some difficult problem, as in the case of the above-mentioned letter. But in some cases it is a deliberate and established policy. All change, all adventure, all high ambition are shunned. Above all the more intimate personal relations, which while yielding the greatest fulness of life perhaps require the most taxing adjustments of all, are carefully avoided. The result is safety, to be sure, but at the price of all that makes life worth living.

> The ministries and the large government offices are often retreats for people who need a life ruled by superiors, without hard knocks and without responsibilities. They do not marry, have no mistress, no children, they visit few persons, and they give enormous attention to the choice of the rare individuals whom they permit to approach them; they live alone as much as possible in order to have no concessions to make. They spend little even when they are rich; they do not engage in any business or enter any rivalry with anyone. Their precautions, their silence, for they know how to be silent about their own affairs, result in their being seldom

> exposed to attack. Moreover, they assume the appearance of not seeing or feeling evil and hide their heads like ostriches. If it is necessary, they stand attack; "they turn their backs and let nails be driven into their shoulders" rather than fight. They know how to evade orders and requests. "When you jostle them they give way, they retreat into their shells or slip between your fingers, and no one can affect them. The public calls them egoists and cowards. They are perhaps wise men." [2]

Janet here calls them wise only because they are presumably unable to make the adjustments required to live a fuller, more normal life. They are "wise" because, by choosing this colorless, barren and dismal life they avoid the other two forms of the illness, the social wrongdoing and the mental misery. But it is very questionable whether this way of life is any better than the other two. While it escapes the legally punishable forms of social wrongdoing, it certainly is not socially good. And while it escapes the more intense forms of mental anguish, the slow death in life which they incur can scarcely be much better. They suppress those surplus responses which give the chief drive to human nature.

In order to diagnose this chief ill of human nature in its three forms of social wrongdoing, mental misery and impoverished life, let us analyze the psychological process which one undergoes in trying to adjust to some difficult situation. As we go along we shall note the different places where failure may occur and bring on the ill. This will enable us to note what is required to cure the trouble and what religion can do to administer this cure.

1. First one must be aroused to undertake the prob-

[2] Pierre Janet, *op. cit.*, p. 168.

lem. Some regulating adjustment, commonly called a purpose, must be stimulated to sufficient tension. Sometimes failure occurs here at the very start. Surplus responses are aroused so that one feels there is a problem and may be more or less harassed by it. But one drifts. He dreams, perhaps, of what might be done. Or he simply sways from one idle impulse to another, as a rat in a trap or a lion in a cage, moving restlessly here and there, but without any attempt to formulate a definite plan of action. Those major adjustments which constitute purpose are not sufficiently stimulated. One may idly dream or he may slash about causing social damage; but he does not buckle down to the job.

It would seem that the cure for this is a stronger stimulus that would arouse more energy, and especially a stimulus that would bring to higher tension those more fundamental attitudes and determining adjustments that constitute steady and serious purpose in life. Something is required to impart deeper enthusiasm for life—something in the form of a life purpose. Religion plainly offers itself as a means to salvation when the great ill appears at this stage.

2. But even if one has sufficient enthusiasm and seriousness of purpose to undertake the problem one may fail at the second stage. The purpose may be generated and the undertaking begun, but there may be a dearth of subordinate responses. A sufficient number of minor units of behavior may not present themselves for organization into an adequate course of action. To use the above-mentioned letter as an example, I may not be able to think of the proper things to say. I cannot compose a satisfactory letter. The necessary statements simply will not occur to me. Failure in the first case was due to lack of tension; here it is due to lack of subordinate responses or suggestions.

Cure for this would be increased sensitivity on the part of the individual to more stimuli in the total situation, for such stimulation is required to bring forth a sufficient number and variety of responses out of which to organize the projected course of behavior. And how can this increased sensitivity and more pervasive stimulation be brought about? Only by an earnest, devoted, critical and comprehensive survey of the total situation. Here also religion in the form of worship presents itself as the way to salvation.

3. The various impulses, supposing they are aroused in sufficient number and kind, must be experimentally tested, either in imagination or in overt practice. Of course if the situation is a familiar one this is not needed. But in that case the adjustment is not likely to be difficult. In a new and complex situation it is impossible to make an adequate adjustment without such experimentation. The experimentation may be what we have called imaginative. A very simple illustration of that would be a mathematical computation. Instead of experimenting by overt practice, which, for example, might be laying a stick down across an opening so many times, one might compute the number of times by dividing the length of the opening by the length of the stick. That would be imaginative experimentation. Of course imaginative experimentation has many other forms besides that of mathematical computation, although none is so accurate as mathematics. That is the reason all science endeavors to reduce its materials to forms that can be treated mathematically. But whether mathematical or not, this imaginative experimentation makes up the greater part of what we call thinking.

Failure may appear at this stage even when the other two steps previously mentioned have been safely made. One may act too hastily, too impulsively, as we say,

which means that he does not wait to test his projects. For some reason or other he cannot tolerate the delay required to complete the experiments and so ascertain which course is best. He cannot hold judgment in suspense. Consequently he plunges and fails.

The cure for this would be anything which gives patience. Whatever gives one that poise and self-control called peace would make one able to wait until he had tested his impulses. Nothing is more difficult, more wearing, on one who lacks this peace, than waiting. Experts like Pierre Janet are prone to think that this state of suspense is one of the chief causes of the breakdown we are considering. Patience and poise and quiet waiting for sufficient evidence before final decision is made, and readiness to give up any cherished plan as soon as it is proven inadequate, all this can be achieved by that devoted self-surrender to the great enthusiasm for life which religion provides. It is found through worship.

4. Finally, after the proposed methods have been tested and the best chosen and the problem solved, there remains one final step. There must be action. One must carry out what he has finally discovered to be the required course of action. But here is the sticking point for many. Here is where the letter writer, in the case described by Janet, failed. His interest and enthusiasm have carried him up to this point, but now he can go no farther. What can be done?

Here again it is plain that religion is the way of salvation if there be any salvation for the individual in this difficulty. If the greatest enthusiasm life can offer is not sufficient to carry one through this stage, then nothing can help him.

We have described the greatest ill of human life and we have seen that religion is the greatest cure. The

kind of enthusiasm which religion provides, and that critical devoted survey of the total situation with a view to most abundant living which is worship, are the means by which to solve all the greatest problems of human living insofar as they can be solved in any way at all. The central drive of human nature, which arises from what we call the surplusage of responses, not only finds its largest fulfilment through religion, but it also finds its chief cure in religion. This is very natural, and similar to the cure of any other ill. The best cure for any functional disorder is to provide the optimum conditions of health. The ill we have been considering is a functional disorder of that drive of human nature toward fuller interaction with the total environment. To seek religion is to seek restoration of the normal function.

The relatively new science of psychotherapy has made and is still making a very profound study of this ill of human nature. Very frequently psychotherapists claim that religion is very crude and unsatisfactory as a means of cure. Such is the view of Pierre Janet, who is, perhaps, the greatest of them all. And yet we can use his own words to prove the superiority of religion in this field, when religion is at its best:

> It is the patient's conduct that must be reformed in its entirety. He must be taught to live a life worth living; and to attain this he must be taught a sort of stoicism tempered with Christian charity. Such an ethics is to alter his will as a whole. Such a profound change of morals will indirectly suppress all the symptoms, for it is obvious that a will that has reached such a high degree of superiority will no longer tolerate such defects.
>
> From the theoretic point of view that seems to

be superb; from the practical point of view it leaves me uneasy. Doubtless it is always useful and right to change a lazy coward into a brave worker, or an egoist into a generous man, and such a transformation should have the happiest effects on the pathological symptoms. But this is a very extensive undertaking and one that seems to be not always necessary. Is this what the patient demands of us when he comes to rid him of a tic, of insomnia, or of a stomach pain? Is this the rôle for simple physicians like us? Have we time and means for it? It would be easy to show that the alliance between physician and preacher such as appears to have been realized at Boston in the "Emmanuel Movement" is not very reasonable, and that it is, in spite of appearances, as irksome for the preacher as for the doctor.[2]

Janet plainly says that the only complete and satisfactory cure or prevention for these ills which the psychotherapist treats is to "alter the will as a whole." And this, he implies, is the work of religion. But this radical transformation of the "will" through religion is something for which the psychotherapist has not the "time and means." With all this we thoroughly agree. But all this only supports our claim that religion is the agency by which this more thorough and complete cure and prevention are accomplished, providing there are "time and means" to apply it.

But we would go even further than Janet in saying that this religious cure cannot be applied by either pastor or physician, or the two in combination, although there are many cases where one or both can render very great assistance. There may be many cases where religion

[2] *Op. cit.*, pp. 111-12.

can be brought in as an auxiliary, if it is done wisely. But in general, and in the largest way, no man or group of men can apply religion to the cure of other people as one might apply a medicine or a massage or any psychotherapeutic treatment. Genuine religion is of such a nature that it cannot be used in this way. It cannot be confined in formulas and handed out in the shape of "treatments," therapeutic methods, teachings, or anything of the sort. Genuine religion is something which each man must find for himself. Others may help immensely, to be sure. But the help of others can only be to point and suggest the way. The chief help they can offer will be the religion they themselves experience and practice. Methods and formulas cannot confine religion. It evaporates out of them. Any method or formula one may devise for treating the mentally ill cannot, for this reason, be very efficacious in transmitting the help of religion to the sick. Religion simply will not stay inside the bounds of such methods of treatment.

But if the patient knows religion can help him, and if he avoids the false notions of what religion is, he may by searching find it and so attain its power to cure or to prevent these grievous ills of human nature. He may put himself in the way of catching the great enthusiasm.

But despite the superior efficacy of religion we must never think that religious ministry can ever be substituted for the work of the psychotherapist. There are several reasons for this. The most important is that often the attitude of the patient must be corrected before he is capable of religion. Religion is a function of normal healthy human living. But one may become so ill, or ill in such a manner, as to be unable to enter into the functions of normal healthy living. This is true whether the function considered be that of thinking,

association, eating, breathing or religion. Certain corrections must be made before the patient can exercise these normal functions. It is here that the physician has his part, whether it be a physician of the physiological or the psychological processes. The psychotherapist has a work to do which is not to be identified with that of religious ministry. He should correct the mental and bodily state of the patient, so that the latter may again exercise the functions of religion, digestion, association, etc.

We do not mean that every neurasthenic has lost the capacity for religion. On the contrary some are very responsive to religious ministry. But some do become incapable of religion as others become incapable of eating or walking or talking. Some not classed as neurasthenics are also incapable of worship. Anyone who cannot exercise the function of religion is pathological and in need of cure, whether by a psychiatrist or someone else.

But we are rapidly coming to see in all branches of medicine that we have been putting too much dependence upon corrective measures and not enough upon the normal functions. All drugs and other treatments should be subordinated to the one task of restoring, as quickly and simply as possible, the normal functions, and leave it to these to complete the cure. This applies to religion as much as to any other function. The corrective measures of psychotherapy should be applied where the individual is incapable of the normal functions of religion. But wherever possible that normal function should be restored.

If by salvation we mean the progressive fulfilment of the deepest need of human nature, then religion provides the only way of salvation. Man needs what the lower animals need, shelter, food and physical comfort. But in addition to these he also needs something more;

and it is this which distinguishes him from the lower animals. This is the deepest need of human nature as distinguished from beast nature. It is the need of bringing to fulfilment that multiplication of responses which arise in a man over and above his established habits. It is to develop a growing system of habits. It is to interact with ever more of the world round about him. This is the life of aspiration. To succeed in it is to be saved. To fail is to become a lost soul.

It is a very difficult and dangerous and delicate undertaking to find fulfilment for this surplusage of responses through interaction with more of the world. How can one succeed? Worship, as described in Chapter III, is the best solution to this problem. Religion has many aids in the great function of awakening this surplusage and directing it on the hazardous way to fulfilment through interaction with the fulness of the world. These aids are recreation, play and an occasional vacation, discussion with intelligent people, reading, art and reflective thinking. The last mentioned is exceedingly important, but it should be joined with worship to be most effective. In fact all these should be joined with worship, for, as before said, they are aids. There should be no competition between them and worship. They cannot function satisfactorily without religion, nor religion without them. The most difficult problems of adjustment and the fullest growth of adaptive interaction with environment cannot be achieved without religious worship. If this fullest growth, and escape from the great disasters which threaten it, be salvation, then religion provides the only way of salvation for humankind.

CHAPTER VII

The Religious Vision

The religious man is like one on whom love has fallen. There is something now for him to live for far beyond anything he had ever before been able to imagine. He has discerned something surpassingly lovely and alluring which stirs the deepest passions of joy and devotion in those who have found it. It is that which captivates the lives of men and enthralls beyond any other beauty or any other good. It is God.

Religion is not merely a belief. It is a vision and a certainty. God, as we have defined him, is a certainty. But vision is more than certainty. It is possible to have certainty without vision; and religion requires vision. A man must not only be certain this Object exists; he must have vision of it. That means he must have such appreciation of this Object that it transforms his life, glorifies his world and fills him with a great enthusiasm for life. He must be not only intellectually persuaded but emotionally stirred; not only cognize the fact but discern its value and catch its significance. He must so realize it that it wins his devotion and shapes his will. To have this appreciation of the divine Object, and thus to feel the stimulus of it, is to have what we call vision of it. Vision involves emotion, imagination and conversion of the will in devoted self-surrender.

So we say the object of religious interest is not only an object of belief, it is an object of certain knowledge, because God is that Something which is of supreme value

for all human living. When apprehension of this Object becomes a vital and reconstructive factor in human living we have religion. To be religious is to be vividly cognizant and fully responsive to the fact that the universe does contain Something which is of more value than anything else, and to be stirred to joy and enthusiasm by that fact.

But one can scarcely attain to this vision unless some concrete historic object of surpassing beauty and goodness is brought to one's attention, through which the hidden glory can be suggested in concrete form. Merely to know there is a light that never was on land or sea is not enough. We must discern some glint or gleam of it if it is to awaken that deep joy which is religion. The universe may be a diamond in the rough, but if one never sees anything save the dirt and scratches and ugly contortions of the rough outer coat, if there never streams into the eye through this rough outer coat when turned in the light something of the beauty hidden there, it is not likely the rough stone will be cherished as something exceedingly precious. One is not likely to fall in love with the universe with its ugly shame, its filth and pain, unless in some happy moment of changing conditions what is hidden there gleams forth.

Now there is nothing that can adequately give humans a hint of the best this universe has to offer save a human life so lived that there shimmers through it a loveliness so different from the grimy facts of daily life as to seem like a dream and yet be not a dream. This brings us to Christianity.

What we have already said about religion and vision applies to Christianity along with other religions. We have said nothing to distinguish the Christian religion from any other. There is a difference. And yet many professing Christians are less like one another in this

matter of vision and the consequent manner of life than some Christians are like some Buddhists or some Mohammedans or some members of other religions. The saints of all religions have the vision we have described. They differ only by reason of that through which they have attained it. The Christian attains it through the life of Jesus of Nazareth; the Buddhist through the life and teachings of Buddha; the Mohammedan through the Mohammedan tradition.

In Jesus, so we Christians believe, there shines more of the unexplored and mysterious goodness of this universe, and in him there is more promise of that unimaginable blessedness that may sometime flood the world, than in any other. Through him we make better contacts with that which lifts the values of human life to the highest level. Therefore we are Christians.

Jesus has been dawning on the world of man for two thousand years. Scarcely yet is he well above the horizon. Far indeed is he from the zenith. We do not yet receive from him all the light he has to give. Yet, thanks to two millenniums of thought and aspiration and research, there may be some to-day who know him better than ever he was known before, certainly better than he has been known since the first century A.D., and probably better than any of his immediate disciples knew him. Jesus still has much to give us that we have not yet been able to receive.

But it would be a very narrow-minded Christian indeed who would say that the life of Jesus is the only quarter in which the most precious object in this universe is to be found. That something which gives the deepest and most abiding joy human life can know is to be found in many times and places—in landscapes and sunsets, in many human situations and individual lives, in works of art such as song and drama, painting

and poetry, in deep love and absorbing work and in the hour of profound meditation. There are many ways of quickening the vision that is religion, and many places where it greets the soul. God is that behavior of the universe which will enable us, on right adjustment, to attain this greatest joy most readily, magnify it and render it most continuous or frequently recurrent.

When this religious vision comes to two or more individuals they are inclined to seek out one another for the sake of sharing their joy and developing the vision of each through interchange of thought and sentiment. They hold a secret joy in common which is secret only because others cannot understand it. They cannot talk to others about the precious and exceeding wonderful mystery they have discovered in the universe, because others have not made the discovery and the talk will sound like foolishness to them. Their talk will sound to these others as the talk of a mother about her new-born baby would sound to the ears of an old bachelor.

Those who have new-born babies are likely to drift together because of their common joy and the wonder that has befallen each of them. It is for the same reason that religious folk foregather into churches. It is true that the church with its ceremonies, regulations, dogma, officials and cumbersome machinery does not serve this purpose very well. Once an institution becomes established and acquires social machinery adapted to do many things, it enters into diverse activities, some of which may be diametrically opposed to the original good it was designed to serve. Such is the case with the church. But underneath all the machinery and all the superimposed activities of the church, its true reason for being is to provide opportunity for this mutual cultivation of religious vision through sharing of the joy and the thought about this precious thing which they have

found. Wherever two or three are gathered together to converse about this matter we have a genuine church.

Such was the church, and the only sort of church, which Jesus established. The twelve disciples gathered about him were not controlled by any machinery. They had no officials, no secretary, no president; and their treasurer was the one failure in the enterprise. They were bound together only because of a common vision and a common joy. During the first years after the death of Jesus, when Christianity spread so amazingly, the disciples went about in a sort of daze, so filled were they with the exuberance and the wonder of what they had discovered this universe might contain.

However diverse may be the types of religious personality it is plain that religion must change human life most radically. The vision we have described could do nothing else. He who has undergone the religious experience finds a dearer and deeper bond joining him to his fellows. For has he not glimpsed the possibilities latent in the whole great enterprise of human living? Nothing can so intimately and indestructibly bind human beings together as for them to share an exceeding great good which cannot be divided like a loaf into parts, but must be held in its totality by each and all; and a good, furthermore, which must be worked out into manifest form through mutual understanding and coöperation. Loyalty to this good leads each to conduct his life in such a way as to promote this mutual understanding and coöperation which the visioned good requires, if it is ever to cover the earth as the waters cover the sea. It leads to a mighty meekness which ultimately must possess the earth if the vision spreads. It leads to a patience and lowliness which has in it the overwhelming forces of nature. Nature works silently and persistently, taking every rebuff without a counter-blow, and receiving every scar

which the destructive might of man may impose without retaliation, but covering it over again with grass and flower and shrub and tree. Gently and sweetly where the battle has raged, where the steam shovel and dynamite have torn up the earth, Nature heals the break, creeping over the raw jagged wounds of earth with tendril and tiny blade until all the earth is green again. It is in such manner that the Christian lives and works who has caught the spirit of Christ. He is mighty with the meekness of God and persistent with the patience of Nature.

All the good which human life may ever attain will be reached only by adjustment to facts as they are, and preëminently to the ultimately and critically important facts. Just as the energy and warmth and illumination of electricity become available for the good of human life only when right adjustment is made to them, just as the joys and spiritual values of friendship become available for human life only when human associates make right adjustment to one another as they truly are, so all the ultimate and maximum goods of human life are attainable only when proper adjustment is made to that upon which the greatest goods of life are dependent. Air and electricity and human associates are but fragments floating upon that total process which sustains all the goods of human living.

There is a beauty which will glorify all the ways of the world when we make those adjustments which are required for maximum aesthetic appreciation and artistic achievement. There is a measure of control over all the forces of nature and over all the conditions of human happiness which will be ours as soon as we make those scientific and other intellectual adjustments which are required. And there is an intellectual comprehension of the magnificent sweep of the intricate universal proc-

ess through time and space, which is an added good to be attained through thinking, over and above that control of nature which science affords. And there is a creative intercourse of minds, a love, coöperation and mutual understanding, that will yield unimaginable joy when we make the required social and moral adjustments.

Now such a total set of conditions out of which such an abundantly satisfying life is to be developed is already with us, because such a life can be attained only by proper adjustment to actual conditions as they are. God is either the most deeply sustaining of these conditions, or else somehow the totality of them. In either case God is that which will yield us the greatest good that human life can ever attain when proper adjustment is made to him. The adjustment must be a matter of personal habits, of social organization, of thinking (which includes science, philosophy and common sense), of art and of morality. But the condition which is the sustainer of all these, and through adjustment to which the utmost loveliness, good will, joy and power of life are to be attained, is happening to us even now. "It is both a present fact and a remote possibility; it is most real and yet to be realized; it gives meaning to all that passes and yet eludes apprehension." It is God. To be aware of it is to have that vision called religion.

To be religious is to have all one's life shaped by the profound recognition of this present fact with all its unutterable possibilities. To worship is to turn one's whole attention to this present, ultimate, sustaining condition of human life called God, with all the fulness of attainment which is to be achieved through right adjustment to him. The religious man is stirred with this vision, is given assurance and peace by it, is inspired by it to reconstruct our human way of living with respect

to personal habits, social organization and intellectual, artistic, aesthetic and moral endeavors, to the end of making those adjustments which will enable God to fill our lives with the good which may be ours. This is the method of religion.

PART TWO

CONCEPTS OF RELIGION

CHAPTER VIII

The Nature of Religion

Religion is man's acute awareness of the realm of unattained possibility and the behavior that results from this awareness. The acute awareness is religious experience; the consequent behavior is man's attempt to get into right adjustment with the most protecting and sustaining behavior of the universe to the end of escaping the terrible possibilities of evil which have entered his awareness, and to attain the glorious possibilities of good. In many religions this most sustaining and protecting behavior is called God. But whether it is called God or not, every religion either finds or searches for something that will provide these major goods and save from these major evils.

A great deal of religion, the sort we shall later describe as second-hand, consists in living in accordance with some "certified plan of the universe" in which God is accurately defined and the way of adjusting to him is minutely prescribed. Religious people differ greatly with respect to the importance given to the traditional "certified plan" on the one hand, and the searching experimental processes on the other. But unless there is at least some modicum of the latter we maintain that the paraphernalia of religion is a sham. Since this last is perhaps our most controversial point we must devote a paragraph to its clarification.

A "certified plan" can be transmitted only by means of words or other symbols. But symbols do not deposit

their meanings miraculously in the mind. We can find what they mean only by searching out that meaning in the actual processes of experimental living. This is peculiarly true of those obscure and most intimately personal adjustments which are involved in religion. Symbols, such as words and the like, serve to suggest experimental processes, i.e. certain mental attitudes and courses of conduct. But unless these experiments are made, unless one cautiously and inquisitively and critically tests these attitudes and courses of conduct with a view to discovering what they reveal, he can never know what the symbols mean. And the chances are a hundred to one that the first thing the symbols suggest is not what they were originally intended to suggest. He can discover the life which is "right with God" only by examining and correcting his first impressions by the method of putting them to the test in the actual process of living. Therefore we say religion is a sham unless it involves critical, cautious, personal, experimental adjustments of one's whole life with a view to discovering how to live in harmony with the most sustaining behavior of the total environment. Unless one does this he cannot even know what the faith of the fathers was, however well he may repeat the words by rote.

Religion is one way in which we seek to attain good and avoid evil. It differs from all other ways of dealing with value in two respects. First, the field of its search is more inclusive than in any other undertaking. It is concerned not only with all the goods produced and evils averted by the several arts and sciences, but it reaches out beyond them to consider the goods and evils of all time and all space and all possibility. Second, the experimental process by which it prosecutes the search is more radical than in any other undertaking. It endeavors to attain the great goods and avoid the

great evils not merely by experimental adjustments in some carefully segregated department of life, but by experimenting with the most intimate and personal and ultimate loves and loyalties and hopes and fears, thereby seeking right adaptation to the behavior of the universe which most vitally and profoundly affects human welfare. This radical, intimate, personal form of the experimental process on the one hand, and the inclusive reach of values sought on the other, distinguish religion from all other human ways of promoting the good of life.

The nearest rival to religion in the matter of inclusiveness is morality. But religion reaches out to deal with unexplored possibilities of value, beyond the reach of morals. Morality endeavors to organize life in such a way as to attain the definable goods and avert the definable evils that may befall human life. Morality may go even further than this. It may become highly adventurous and explore the realms of undefined and heretofore unencountered goods. And it may endeavor to guard against undefined and unencountered evils. But when it does this it begins to take on the character of religion. There is no necessary opposition between religion and morality. They often merge, but they can be distinguished.

Morality is not religious when it ignores the more remote and presumably vaster possibilities of good and evil which lie beyond the range of our definite knowledge and mastery, and concerns itself solely with the organization of those goods which we can more directly control and accurately know. Religion is not moral when it becomes so absorbed in the remote and cosmic possibilities of good and evil that it assumes no responsibility for the manifest goods of the various arts and sciences such as those to be found and promoted through

association with our fellows, through industrial and political action, the fine arts, scientific procedure, and so forth. But no religion is fully normal and wholesome which is not moral, and no morality is satisfactory which is not religious. The two must merge if either is to fulfil its function as human living requires.

All other ways of dealing with good and evil, which may be lumped together under the general head of all the arts, including quest of beauty, quest of knowledge, quest of social community and coöperation, and the others, are generally recognized to be more limited in the scope of value which concerns them. Religion seeks beauty along with all the fine arts and aesthetic culture, but it goes beyond them in quest of a possible beauty which no art can master and which aesthetic culture as thus far developed has not yet touched. So also it seeks a richer, more concrete and more complex knowledge than any science thus far established can hope to attain. Some day a science may be devised to give us this most concrete and far-reaching knowledge, as some day an art and aesthetic culture may be developed which will unveil the beauty which fills the religious soul with yearning. Indeed it is just this unlimited aspiration of religion, this questing throughout the infinite realm of possibility, which will some day bring forth into actuality this greater knowledge and beauty, this more able science and art, if ever they are brought forth. In this sense religion is the great progenitor of the arts and sciences, both historically and prospectively, both socially and psychologically. This naturally follows from the fact that religion springs from man's acute awareness of the vast realm of unattained possibility.

Religion seeks a love beyond any love that has ever developed between human associates. It seeks a love which, so far as human association is concerned, is only

a possibility. But precisely because religion does afford a vision of this possibility, it stimulates love-making betwen parent and child and David and Jonathan and man and woman to the end of achieving more love between humans. And love-making is one of the great arts of living. Thus does religion inspire the arts to larger achievement by keeping before them the mysterious realm of possibilities. It revives the flagging zeal and widens the horizon.

We have seen that religion is the progenitor of the arts and sciences. We have seen, furthermore, that after it has brought the arts into being it continues as their inspirer. It serves still a further function with respect to them. It is their stabilizer and integrator.

Each department of human living, such as each of the several sciences, the fine arts, political and industrial activity and home life, has its own special realm of goods, possible and actual, which it may attain and which it sustains. But unless there is some overarching search after a total good, human living falls asunder. If each department devotes itself to its own separate region of possibility, and ignores all else, confusion follows sooner or later. Maladjustment and conflict inevitably arise among these separate interests. And all vision of the total good of life fades out unless religion supplements the arts; for religion provides this vision of the total good. By rendering the individual aware of the undivided realm of total possibility for life as a whole, it restores community and mutual adjustment among the arts and sciences, and gives to the individual a unity of purpose and a pervasive enthusiasm for life as a whole. Without this religious unification life loses direction and zest; it becomes aimless, barren and stale.

As culture advances and the various functions of human living become separate and specialized into dis-

tinct activities and institutions, this integrating service of religion becomes increasingly urgent. The declining strength of religion in recent centuries, for reasons elsewhere considered,[1] has left this integration incompletely accomplished. The consequent evils are many and serious.

It has sometimes been thought that philosophy could accomplish this work of integration. It is true that philosophy may develop an integrating theory. But the integration itself must be a certain way of living. And when a philosophic theory becomes an actual way of living (if ever it does) it becomes forthwith a religion and more than philosophy. Every cultured religion involves a philosophy inasmuch as it entertains some theory about the universe as a whole. But religion is more than philosophy; it is an experimental launch of the whole of life by which the possible goods which the theory portrays are brought forth into the actual goods of human living. Philosophy is a theory, while religion is a way of living. Religion is the most complete and full-orbed expression of the striving toward interaction with the widest and fullest environment, physical and social, minute and vast, past, present and future, near and far, actual and possible. All the arts and sciences peculiar to human living express and promote this endeavor; but they all differ from religion in that they express and promote only some one phase or aspect of the great enterprise. Religion alone is man's attempt to deal with the total problem of increasing to the maximum the intercourse of man with his total environment.

Let us restate the problem which religion undertakes to solve. It is, first, to find that behavior of the universe, and, second, to make that human adaptation to it, which will yield the maximum good. The maximum good for

[1] See Chapter I.

humankind, human nature being what it is, is interaction with the widest and fullest environment, physical and social, minute and vast, present, past and future, actual and possible. This twofold problem arises inevitably when man becomes acutely aware of the awful, alluring and horrifying realm of boundless possibility. Such awareness is religious experience. Such awareness can reach its maximum when the confining routine of habit is disintegrated under peculiarly intense stimulation, as described in the next chapter. Consequently religion is the total outreach and farfling of human life toward maximum abundance. When philosophy and the special arts and sciences can help in this great endeavor, it draws upon them, or should do so. But when they cannot help, as in wide regions of life they cannot, religion carries on alone. Philosophy investigates the universe as a whole, but life in adaptation to the most important behavior of the universe is more than investigation. It is the total vital process launched upon an undertaking, and not merely the formulation of a theory. A theory is needed, hence philosophy is of greatest assistance. But religion, not philosophy, is the proper name for that enterprise of so conducting the whole of human life as to catch whatever winds and tides there be which may carry human living to its largest possibilities. Religion started the great quest before any of the arts and sciences were born; and it adventures still beyond the bounds of any art or science. Religion is the undying fire of human aspiration. Its flare searched the Great Dark before our little lamps of culture were ever invented. The monstrous shapes and ghastly figures that seemed to hover where the wild light fought the dark in those early days of savagery have been driven back by the steady, even light of modern culture. But out beyond the illumination of our craft and knowledge there still streams the glare of

this quenchless flame of religious aspiration, searching amid vague shapes and shadows for those further possibilities which all Being has to offer. There is no questing in all human life so valiant, so heroic and adventurous as religion.

This explorative and adventurous spirit of religion may show itself in the forms of the historic religions, such as is embodied in doctrines about life beyond the grave and the final outcome of history and the supernatural and transcendental generally. The notion of a supernatural and transcendental realm arises from man's awareness of remote and undefinable possibilities. But this spirit of religion may also express itself in ways which lie quite outside these institutionalized forms. These more direct and personal expressions of religious groping are becoming more frequent in recent times. As an example of this religious spirit in unconventional guise let us quote the words of a talented young friend of the writer. The following poems, which have never yet been given to the public, show this explorative spirit of religion by contrasting it with the self-satisfied life of the human animal cherishing pleasant little dreams and fancies but ignoring those vast possibilities and that terrific search and experimental launch of life which constitute religion.

I could not see the fairy things
  Altho' I fought my way
With weary heart and wounded wings
  Beyond the realms of day.

I cannot see the little dreams
  That dance around the fire.
My soul is sick with vaster themes
  And deadlier desire.

I cannot see the friendly sprites
That tumble in the smoke,
My brain is blind from glaring heights,
And stunned with lightning stroke.

Ah, lovely must their visions seem
Who only sit and play
With rosy gleam and fairy dream
And tenderness and Fey!

I cannot know, because my ears
Are muffled with the moan,
Because my eyes are blind with tears
That other men have known.

Ah, God—the splendor in your eyes,
The music on your lips. . . .
But I have been where vision dies
And strangling darkness grips.

I pray that you may pray for me,
O curving lips and kind—
But not to be as you must be,
And blind as you are blind,

For I would know that you are thus;
Immutable, remote,
Your heart that could not war with us,
Nor care wherefore we smote;

Above the battle where we ride,
And Day that follows after—
A surf of song when we have died,
And drifting dust of laughter.[2]

The same contrast between the easy, complacent life and the peering and striving of religion is set forth in

[2] Entitled "Magus," by Donald Cary Williams.

the following lines. We call this religious even though the outcome seems to be one of disappointment. At least the far reach and search after the ultimate good of life is there, even though no ultimate good be found:

The blind seas break against our homeless prow.
  The little folk are sleeping, berth by berth,
  Or move with fretful moans and slumbrous mirth.
We restless tread the dreary decks, and bow
To empty gales, who serve the ancient vow.
  The dark winds shake the shrouds: their salty dearth
  Is dried upon our doubtful lips. What worth
Are vigils down the vacant waves we plow?

The Deep is void before; and what comes after
  The cold high glory of the Watch we keep?
    Our eyes are blurred from questioning the night;
Our bitter lips forget the taste of laughter.
  They sleep, then, wisely, smiling in their sleep;—
    We have not found a Port, nor any light.[8]

Religion is the cold, high glory of the watch. If it does not find a port nor any light, it is still religion. If it does, so much the better.

But this valiant, heroic, adventurous character applies only to first-hand religion. It applies only to that human behavior which springs from the innovating religious experience. When religion becomes second-hand, when it becomes institutionalized and traditional, it may take on a character exactly opposite to that which we have portrayed. This distinction between first- and second-hand religion is so important that we must dwell upon it.

These terms, first- and second-hand, merely serve to point out the distinction between the experience which

[8] Entitled "The Watch," by Donald Cary Williams.

generates religion and the tradition which conserves whatever vision and other achievements of the innovating experience are capable of being perpetuated in the form of doctrines, practices, bibles, institutions and ceremonies.

It is probable that no one has first-hand religion solely. The innovating experience scarcely arises without the stimulus and guidance of some traditional culture; and this culture gives tone and character to the experience. As religion gushes forth from the original experience of the individual it immediately blends with the cultural stream flowing down from the past, so that its own waters are not distinguishable in color, odor or taste from the muddy sediment of other times and experiences. But our figure is not adequate. The interdependence and interpenetration of first- and second-hand religion are even greater than indicated. The spring could not gush if the stream did not flow. Human culture, both religious and otherwise, is necessary to develop in the common man, as distinguished from genius, that type of personality which is capable of undergoing the innovating religious experience. Without such culture the common man would scarcely be human; certainly he would lack that fine sensitivity to innumerable and delicate stimuli, that freedom and multiplicity of impulses, and that constructive imagination which are necessary for genuine, personal religious experience.

Second-hand religion does, then, have its value and its rightful place. But if it be not constantly revitalized by the original innovating religious experience it becomes degenerate. This degenerate sort of second-hand religion is very common, and for many people the word religion connotes only this degenerate religiosity. Consequently it is exceedingly important that we distinguish

very carefully between it and the sort of thing we are describing under the name of religion.

After men have undergone the religious experience, which is an acute awareness of the realm of unexplored possibility to be attained or avoided by right adjustment to the most sustaining Behavior of the universe, and after they have proclaimed this way of life held by faith, and others have adopted it, then a counter-tendency often sets in. This counter-tendency leads to religious degeneracy. Let us describe it.

All men part of the time, and most men most of the time, shrink from the vast and the unknown, from the unexplored terrors and glories of existence. They strive to shut out all this from their awareness. So they rear great walls of myth and on these walls they paint pictures of what they think, or would like to think, the vast unknown must be. They make these pictures as clear and definite as they can. And they insist that everyone who adopts the cause of religion shall declare himself certain, beyond peradventure of a doubt, that all the vast unknown, all eternity, and God and heaven and hell, is just precisely as these pictures represent. For only in this way can they make themselves feel comfortable. Only in this way can they preserve that complacency which the animal nature of man so persistently craves. Only in this way can they shut out the mystery, the terror, the uncertainty, the groping spirit, that reaches and strives after the unattained. Only by insisting that everyone believe the literal reality of these pictures, and thus support their own belief, can they protect themselves from the discomfort of doubt, from the annoyance of wonder and adventuring. Only in this way can they shut out from their thought and apprehension the great mystery which is God, and so make the total realm of all being that encompasses them appear to be as home-

like and familiar as their own back yard. If it include the ash heap and the tin cans, so much the better. One feels more at home.

Now this kind of "peace," which consists of animal complacency and freedom from the annoyance of adventure and exploration, is a reversion from the human to the animal. And religion is often distorted in such a way as to provide this kind of peace. The minister who dares to disturb this animal complacency is sometimes hounded from the pulpit. This line of development often appears in historic religion. It has appeared in Christendom and still is to be found there. But it does not attend the origin and growth of religion. It is the degradation of religion.

In contrast to this degenerate type of religion the genuine thing is man's awareness of the vastness and the terror and the unknown good of that which encompasses him. It is also his endeavor to explore these possibilities of immeasurable degradation and anguish, and glory and blessedness, in order that he may apprehend the best which the universe has to offer and live by it; and to apprehend the worst in order that he may flee it or destroy it or war against it, or otherwise protect himself from it. It is his endeavor to find that adjustment to the most protecting and uplifting Behavior of the universe in order that he may be saved from the worst possibilities and may actualize the best. Religion of this original sort is man's groping into the unexplored possibilities of all being in order to win ultimate salvation and escape ultimate destruction.

CHAPTER IX

Ultimate Cause, Supreme Good and Religious Experience

We shall endeavor to clarify two concepts which are most constantly and intimately involved in religion. They are ultimate cause and supreme good. The critical question for all religion is the relation between these two. Are they interdependent and inseparable, or are they independent and separable? Is the ultimate cause a necessary constituent of the supreme good, so that when we refer to the supreme good we must include the ultimate cause as supremely good? Or can we conceive the supreme good without reference to the ultimate cause? Answer to these questions can be found by correctly defining these two concepts and noting their implications.[1] But the key to the problem of how ultimate cause and supreme good are related to human life is to be found through interpretation of religious experience.

All the great historic religions have assumed that the supreme good involved the ultimate cause. They have assumed that to attain the supreme good we must get into right relations with the ultimate cause. He who gets right with the ultimate cause will have the supreme good. He who gets wrong with the ultimate cause will have the supreme evil. If this view is mistaken and people come to see the mistake, we can still have moral idealism which strives toward an unattainable good, and we can still have metaphysical speculation concerning

[1] The more formal definitions of these concepts are given in the next chapter.

the nature of the ultimate cause. But what we cannot have, if this view is correct and seen to be correct, is the passionate lunge and striving of men to actualize the supreme good by way of experimental adaptations to that ultimate condition which determines what measure of good shall accrue to human living.

If the ultimate cause does not determine the supreme good and if attainment of the supreme good is not dependent on getting into right adjustment to the ultimate cause, then the supreme good is unattainable. This results from the fact that the ultimate cause determines all that is and all that ever shall be. If, therefore, the supreme good is not sustained by the ultimate cause it can never be attained.

One can deny that there is an ultimate cause by holding to the doctrine of indeterminism. We do not believe indeterminism can be intelligibly upheld when all its implications are thought through. But suppose indeterminism were true in the sense that the supreme good was not determined by any cause, i.e. condition. Then its attainment would be a matter of accident. It could not be attained by intelligence because intelligence can operate only by shaping those conditions that determine consequences. The chance of attaining the supreme good by accident practically amounts to denying its attainability because of the infinitude of other chances.

It has been declared that while religious faith in attainment of the supreme good (variously called kingdom of God, salvation, heaven, Nirvana, etc.) through right adjustment to ultimate cause (variously called God, determining structure of the cosmos, Law, etc.) is an illusion, nevertheless it is a very precious illusion. Indeed there are some to-day who are saying that the saving power of religion lies precisely in this illusion. Let us examine one example of this viewpoint.

Horace Kallen [2] has recently upheld this position. The mystery and wonder of religious experience, of which he makes a very fine analysis, arouses speculation on the part of the one who has undergone it. He is so enthusiastic about it that he must express his feelings. But what can he say? The experience has been ineffable. He cannot describe it. He cannot know what it means. Consequently he does either one of two things; either he repeats with glowing ardor the old traditional formulas that have been handed down to him, or else he formulates beliefs of his own. These beliefs, whether traditional or original, are myths, but he must have them partly to rationalize the experience in his own mind, and partly to enable him to give expression to the tumult of emotion that has been stirred within him. None have been more voluble than the mystics, but having nothing about which to talk save an ineffable experience, they create works of imagination.

These products of mystic fancy are accepted by followers of the prophet as a true report of some existent reality. The mystic himself generally so holds them. They constitute religious belief. They are of such a character as to comfort and inspire because of the delightful nature of the religious experience from which they emanate, and because there is no factual evidence to check the exuberance of the creative imagination. As these beliefs are transmitted to following generations they are further elaborated, systematized and otherwise modified to suit the changing requirements of life, and especially to suit the needs of the priesthood and religious institutions.

These religious beliefs plainly are illusions, says Kallen, but nevertheless they provide salvation. This is why religion saves, according to him. In time of dis-

[2] Why Religion.

aster or mental conflict men would despair were it not for these comforting and inspiring beliefs. The "blind" physiological mechanisms that keep the beast going when all striving appears hopeless do not suffice for men. Men must have illusions to keep the heart from breaking, to keep up enthusiasm and release of sufficient energy when the situation appears hopeless in the light of that limited knowledge men possess. Men would have perished from the earth long since were it not for the stimulus and sustenance of these religious beliefs.

Some may protest that Kallen is destroying the saving power of religion by showing the illusory character of these beliefs. Not at all, he would reply. Every sane man knows the mirage is an illusion, but when he is dying of thirst he will pursue the mirage just the same, and in so doing may find succor.

> Whenever the sense of breakdown is so intense that we just cannot take the time and patience to reassemble the pieces . . . we call in the expert in the manipulation of the supernatural. . . . If Model 1926 fails us, we haul Model 1898 out of the garage. . . . If scientific medicine fails, we try unscientific healing.

We believe Kallen has correctly stated the facts, but we do not agree with the inferences he draws from them. Religious belief is certainly full of illusion and these illusions console and inspire. But we do not believe they have the value Kallen attributes to them. Illusions are sometimes helpful, but just as often harmful. On the whole we believe they are much more of a liability than an asset. Kallen recognizes that many cherished religious illusions are worthless and many are positively and exceedingly harmful. But, he adds, so great is the

value of those religious illusions that do save in time of crisis when scientific knowledge is insufficient that on the whole religion provides an indispensable good.

We do not agree with him in this valuation of religious illusion, nor in the exclusive truth of scientific knowledge. Illusion may keep us struggling on while life lasts, but the chances are life will not last long when we struggle in that way. Struggle helps survival only when rightly directed, otherwise it hastens destruction. Struggle under illusion is not rightly directed except by accident. Better "freeze" in despair like the baby quail than fly out in front of the gun under the illusion that there is safety. When all known ways are blocked we are saved by falling back on religious illusion, says Kallen, and he points to the old car that carries us to town when the new car breaks down. But the old car is not an illusion; or if it is, if it simply will not run at all, then our reliance on it is our ruin. Religious beliefs are full of illusion, but if they save us in our need it can only be because of some crude and rough-hewn truth, however mixed with error which they contain.

Wherein lies the saving power of religion? Or, more accurately, why does religion lead toward the supreme good? [3] Religion is able to lead us toward the supreme good not because of its illusions. Neither can it do so because of its ready-made truths, for religion is no infallible source of truth. Religious truth, or rather the truth that concerns religion, must be discovered and tested by the same methods by which any truth is attained. How, then, does religion save? And how does it lead toward the supreme good? It does so because of the nature of religious experience and the effects of that experience when it is rightly used. To make

[3] Salvation, as Kallen uses it, is not necessarily directed toward the supreme good.

this plain, let us examine briefly this peculiar kind of experience.

We shall find that religious experience gives us peculiar access to the ultimate condition which determines our world and all the goods and evils which it may offer. It gives us access to this ultimate cause in such a way that we are able to reconstruct experimentally our adjustments to it. The only way to attain any good is by experimental adjustments to the condition or conditions which determine it. This applies to the supreme good and the ultimate condition of that good. Since religious experience enables us to make these required experimental readjustments, it provides the way in which this supreme good may be found.

In setting forth the nature of mystical religious experience we can make use of Kallen's own presentation of the matter, for his view of the facts—not his inferences—is the same as the view we ourselves have previously presented.[4] Mysticism, to which we now turn, is not the only form of religious experience, but it is one important form of it.

Under certain conditions it is possible for the brain to be under great stimulation while the organic system of response is thrown out of order; in extreme cases the whole sensorium is quite completely disorganized. Such a state of stimulation has been observed in the hospital and physiological laboratory. It can be artificially induced in some people by the use of such drugs as ether, nitrous oxide and others. The Yogi technique is one way of attaining it. Excessive dancing, flagellation, gashing, and wildly flinging oneself about are methods which have been successfully used to this end. All these, however, are highly artificial. They represent

[4] See *Religious Experience and Scientific Method,* by the present writer.

perversions of the normal function of religious experience. They have great value for purposes of investigation, however, because, while the psychological state is the same as that of natural religious experience of the mystic type, the conditions which induce these artificial forms can be controlled, while the natural religious experience cannot be so well controlled and observed.

Turning to the natural conditions that induce the mystical religious experience, we note that sudden disaster and shock may bring it on. The disintegrating conflict within the personality of powerful antagonistic cravings may produce it. The sense of overwhelming danger, the baffling frustration of some insistent striving, a scene of such awful grandeur that it breaks down the established integration of personality, any of these may bring on the experience to greater or less degree. Sometimes the stimulus between man and woman may attain such shattering force as to yield this experience. It is impossible to list all the different natural conditions that produce it. Yet withal it is exceedingly rare, and Kallen thinks the great majority of people never have it. We believe, however, it is a matter of degree and that many people may approximate it more or less remotely. Some people may be able to throw themselves at will into a state approximating this when they desire to worship.

The distinguishing characteristic of mystical experience is this intense stimulation producing vivid consciousness, yet without any integrated system of response. Lacking any organized response there can be no perception, for perception involves discrimination and selection from among stimuli and a certain specific adjustment to the selected stimuli. Being incapable of specific response, nothing can be cognized in the mystical experience. It is ineffable and may be either ecstatic or horrific. What we then experience plainly

is not the natural, if by natural we mean the world of perceived objects, but the supernatural, if by supernatural we mean something else than the world of perceived objects. But we see no justification for calling it supernatural in any other sense.

We agree with Kallen in saying that religious experience of this extreme type excludes perception. But when he says it excludes sense experience we cannot follow him. If one identifies sense experience with "tasting, touching, hearing, smelling," then of course it is excluded. But sense experience that is recognized to be a taste or a touch or a sound or a smell is more than mere sense experience. It is perception. All sense experience involving cognition is perception. But it is possible to have sense experience without cognition. Sense experience without perception will not be tasting, touching, hearing or smelling, for to accomplish any one or more of these one must have some organized system of response, some habit of reaction, by which one discriminates within the mass of experience certain features and reacts to them in that specific way which constitutes perception. But when all organized systems of response are broken down, as is the case in extreme mystical experience, when all habits are disintegrated and all established ways of reaction are disorganized, there can be no such perception. Nevertheless sense experience does not cease, for there is still a vivid state of consciousness and the sensorium is in a state of stimulation. We understand by sense experience any stimulation of the sensorium affecting consciousness. Since that occurs in religious experience it is a form of sense experience, however disorganized the sensorium may be at the time it occurs.

We should say that in mystic religious experience sense experience is at its maximum richness and vividness but

lacking in perception, defining sense experience as any stimulation of the sensorium which yields a state of consciousness regardless of whether perception occurs or not. When all habits of response are resolved so that experience is no longer bound to the narrow limits discriminated and defined by the established systems of habit, intense stimulation brings us to a tingling glow of sensitivity, and sense experience floods consciousness with a richness not otherwise possible. This is what happens in the extreme mystic experience.

Religious experience of this sort provides two conditions which promote experimentation in human living and which are almost indispensable to the more radical and intimate kind of experiment. First, it frees us for a little time from bondage to our established system of habits and may permanently loosen their hold upon us. Second, it gives us an ecstatic and stimulating experience of that ultimate substance out of which new worlds may be made by developing new ways of reacting to it.

The second of the two contributions just mentioned, which religion makes to the quest of the supreme good, requires a further word of explanation. The ordinary world of objects with which we deal has being only because we react to certain stimuli in such a way as to bring about certain consequences. What I call a tree consists of certain results that will ensue when I react to certain stimuli in a certain way. After I have once experienced those results or had them reported to me, I know that the stimulus means tree. Consequently our familiar world is to you and me what it is because we react to stimuli as we do. A tiger, a monkey and an oyster live in very different worlds from the one we know because they select different stimuli from the total mass of stimuli which this ultimate substance may bring to bear upon living organisms. They select different

stimuli for response partly because of different physiological constitution. The monkey and tiger, having much in common with us physiologically, may select many stimuli of the same type as those to which we react. But even when the same type of stimulus is selected the type of their response is very different. This also is partly due to difference in physiological constitution. However, man is so plastic that it is probable he could not only select many of the same type of stimuli that affect the monkey and tiger, but could react in many respects much the same. He does not do so, however, as a rule, largely because of his ability to use symbols, which gives rise to language, communication, invention, tool-using, and culture generally, with all that radical transformation of primitive forms of response which culture produces.

What has just been stated is presented merely in order to show how much our familiar world of objects and values is the creature of our established ways of response and the type of stimuli we select from that total stimulating substance that constitutes the ultimate condition of any world that may be created. Ultimate condition is, of course, the same as ultimate cause.

Suppose we cease to react in any organized way to this ultimate determining condition of any world that may be constructed by different forms of reaction. But suppose in this state of complete disorganization of all response we continue to receive the stimulation. Suppose the stimulation is greatly increased, yet all organized response is disintegrated. Then we have mystical experience. Then we are vividly conscious yet perceive nothing. Then we have immediate and ecstatic experience of that ultimate source of all worlds that ever may be brought forth into existence by all the different possible ways of organic reaction to diverse stimuli. Then

we have immediate and ecstatic experience of that ultimate something that will give rise to the best possible world when we learn how to react to stimuli in such a way as to generate such a world. It is true that in the mystic religious experience we do not react to this ultimate something in any organized, habitual manner and therefore do not have any world at all. We only have a state of consciousness in which nothing is perceived. But we have reached the ultimate source and condition of any world, in adaptation to which all possible worlds may be developed. We have stripped ourselves of every world in order to go back to the primitive source from which all worlds must come. Out of this state might conceivably be developed the worst of all possible worlds as well as the best, according as one develops one system of response or another.

It is plain that the mystic experience, as thus defined, is a necessary prerequisite to the most radical kind of experimentation. It is true that this opportunity for experimentation may not be used. The mystic may be the most reactionary of conservatives. His mystic experience may serve merely to cast a glamour over the old formulas, old ceremonies and old ways of living. This often happens. The mystic may become so enraptured with his experience that he spends all his time and energy trying to recover and perpetuate the experience for its own sake without any attempt to change his ways of living or the ways of his fellow men. We are not saying that this experience necessarily leads to that experimental conduct of life by which the supreme good may be attained. We are saying only that this experience provides the necessary conditions for such conduct.

The supreme good will be found only as we learn how to select stimuli and develop systems of response to

stimuli in such a way as to give rise to the most delightful of all possible worlds. There is no way of finding what stimuli to select, nor how to react, except by selecting experimentally and reacting experimentally until the best selection and best reaction are discovered. Religious experience makes such experimentation possible. Without religious experience the way to the supreme good is blocked. With religious experience the way is opened. Whether the way be followed is another matter. Generally it has not been followed. Throughout the history of religions we find only rarely that this experience has led on to the experimental conduct of life. But the great founders and transformers of religion have been experimenters in ways of living. They have entered on that way which was opened to them by their religious experience. If this way of experimentation could be patiently and persistently and cautiously followed throughout many generations, the supreme good might be progressively attained.

If God be defined as the object of this mystic religious experience, then the touch of God saves when it lures to the quest of a better world. In this sense God, the ultimate cause or condition, enters into the supreme good, since he is that which gives rise to the best possible world when man makes right adjustment to him.

CHAPTER X

Ultimate Cause, Supreme Good and Religious Experience (*Continued*)

We adopt Professor Perry's[1] approach to the problem of goodness or value, although we do not follow him in all his conclusions. In fact our main contention now, namely, that ultimate cause and supreme good involve one another, is in opposition to one of his main contentions.

The good is any fulfilment of interest. Interest is any motor-affective attitude. One may have such an attitude with respect to conditions without being conscious of the conditions or of the attitude. Hence interests may be unconscious as well as conscious. Interest may be more or less inclusive. One interest may include many subordinate interests. Love at its best is the most inclusive of all interests, for it provides the most complete integration of the greatest number and diversity of interests of the individual and of associated individuals. The supreme good is fulfilment of the most inclusive interest, or, if one prefers the phrase, of the most inclusive system of interests.

The ultimate cause, as we here propose to treat it, is that structure of the totality of all being which determines the bearing of this totality upon our interests, whether to fulfil or to frustrate them. Largest fulfilment of human interest can ensue only through some

[1] See Ralph Barton Perry, *The General Theory of Value.*

adaptation between this determining structure and human activity.

It should be noted that an interest is more than an organic response. The very word response indicates that we are speaking of a mere fragment torn from a whole. Response always involves stimulus. Interest, then, is that whole made up of stimulus and response. An interest is a total process of interaction between organism and an environment. At its higher levels it involves judgment, mentality and all the spiritual processes of human living. Response is always one factor in an interest, certain environmental conditions being another factor. Ultimately every interest involves, as one essential factor, that structure of the universe which determines the totality of everything insofar as that totality affects the response. Hence the ultimate cause, as we have defined that term, enters into every interest.

When we identify good with interest fulfilled or in process of fulfilment we do not make value subjective; neither do we make it merely human, although it is always relative to humans. On the contrary we maintain that value inheres in the totality of all being. If one ask whether value could be found in the universe apart from man or apart from living organisms, we reply that such a universe never has been, never will be and never can be. The reason it never was, nor can be, is that human beings and living organisms are constituent factors in the totality of all being. And since they are constituent factors, the totality of all being has relations to them and can never be unrelated to them.

One can talk about an archaic world that may have existed before any living organisms came into existence. But we must remember that all the past is related to the present as truly as all the future. That past age is a part of our present world, and when it was in existence

our present world was a part of it in the form of its future. Therefore it was related to human life just as all future ages are now and forever will be related to human life. Therefore the whole universe is, and must always be, and has always been, related to human life. The universe has value in relation to human life, and since it can never be unrelated to human life, it must always have value. Value is inherent in the totality of all being because that totality is inherently related to human living.

But let us consider this problem of value as inherent in the world round about us by taking a more simple and concrete case. Take the case of breathing. Breathing is an interest, because it is one unit in the total process of living, just as love and aesthetic appreciation and worship are interests in the sense of being other units in this total process. Value inheres in the process of breathing when that process finds fulfilment. But breathing is by no means merely a human, nor merely an organic, process, although the organism is essentially involved in it. It is not correct to say that the organism alone breathes. Breathing is a process in which the air is just as active as the lungs. Breathing could not occur without the air any more than without the lungs. It is because air is constituted as it is, and behaves as it does, that breathing occurs and that air enters the lungs and is absorbed through the air cells into the blood and sustains life. It sounds strange to say that the air breathes, but it is quite as correct as to say that the lungs breathe. But we can go farther than that. The sun and the earth enter into breathing. It is because of the earth that the air presses down fifteen pounds to the square inch at sea level and hence enters our lungs at the rate and in the density which breathing requires. Indeed if we had time to carry the investigation far enough we

would find that this simple interest called breathing is a process involving vast and complex reaches of our total environment, past, present and future. Therefore, if value consist of interest in process of fulfilment, and since the extra-human universe is just as much a constituent of this process as the human part of it, value inheres in the extra-human universe.

Value is objective; it is "out there" just as much as anything else is "out there," although it cannot be unrelated to human living any more than the rest of the universe can be unrelated to human living. Interest constitutes value; but human interest is always much more than human. We call an interest human when a human being is one factor in it. But the human is never more than one factor. Every human interest is a process of interaction between a human being (or human beings) and extra-human conditions. These extra-human conditions include the ultimate condition, namely, that structure of the totality of all being by virtue of which the environment so interacts with the human as to constitute the interest. Therefore value is not only a feature of human nature, not merely a human sense of satisfaction, not merely a characteristic of human living, although it is all that. But value is, furthermore, a characteristic pertaining to all the universe and to metaphysical reality. It is a character pertaining to the ultimate cause.

Sometimes the satisfaction of a more inclusive interest requires frustration of many subordinate interests which are components of the very system which constitutes the most inclusive interest. Take, for example, the case of suffering as it may enter into that more inclusive interest called love. Suffering involves frustration of some interest, hence from that standpoint is an evil. But if this interest in the state of being frus-

trated is one necessary constituent of a more inclusive interest called love and brings love to large fulfilment, then the suffering is good from the standpoint of this more inclusive interest. In this way the supreme good may actually require a great amount of suffering, not merely as means to an end, but as one necessary constituent in its actual and immediate fulfilment. In this way love, or some other more inclusive interest, may transmute evil. The suffering, or other form of evil, does not cease to be evil from the standpoint of the frustrated interest; but from the standpoint of the more inclusive interest, which may constitute the supreme good, it is not evil but good. Evil can never be thus transmuted, however, unless the sufferer himself finds in his suffering the larger fulfilment of his love or other inclusive interest.

In considering evil in all its forms we must not confuse it with physical pain. Pain is often evil. Often it is a form of suffering. But not necessarily so. Pain is simply the stimulation of certain nerves that are to be found in the organism. It is, therefore, not necessarily the frustration of any interest at all. Of course it generally is. The organism is so constituted that it generally strives to avoid pain. This striving is an interest and the continuance of the pain is frustration of that interest. Pain then becomes suffering and a form of evil from the standpoint of this striving. But if one should not strive to escape pain, if there should be no organic shrinking whatsoever when pain occurs or is threatened, if one should welcome pain and find satisfaction in it, as does sometimes occur, then pain would not be suffering nor evil from any standpoint whatsoever. A simple and trivial instance would be the small boy who delights in a pin prick or small cut for the sake of the thrill. Physical pain, then, as a stimulation of certain nerves,

is not suffering or evil unless it is frustration of some interest.

As inclusive interests often require frustration of subordinate interests, not merely as means to ends but as essential features in their fulfilment, it is quite possible that the best of all possible worlds would include a great amount of suffering and other forms of evil. It would require not elimination of evil but transmutation of evil by love or other such inclusive interest. The supreme good would then include transmuted evil, understanding, however, that evil is transmuted only when the individual undergoing it finds in it satisfaction of a more inclusive interest. Much Christian teaching about the good of sacrifice and the overcoming of evil by "atonement" may have this truth in it.

We do not mean to suggest that the present world with all its evil is the best of all possible worlds. It is very plain that the greater part of the evil in our world is not transmuted by any more inclusive interest. There is not enough love or other inclusive interest in our world to transmute more than a small part of its evil. We are saying only that the best possible world, and hence the supreme good, need not necessarily require the elimination of all suffering and, so far as we can now see, would probably require suffering and other forms of evil.

Since ultimate cause and supreme good are relative to human interests, human nature is one factor that enters in to determine what shall be the ultimate cause and supreme good. Human nature is not the ultimately determining factor because human nature is itself determined by the ultimate cause and the supreme good, as well as determining these. The determination is mutual, but one can be called ultimate inasmuch as it is more potent than the other. The ultimate cause or condition is ultimate in this sense.

However, since human nature changes and consequently human interests change, since individuals and groups are exceedingly diverse in character and in interests, it might well be that what was ultimate cause for one was not ultimate cause for another, and what was supreme good for one not supreme good for another. Thus religions might be diverse and yet equally valid, one religion being the process by which one individual or group or age finds adjustment to its ultimate cause to the end of attaining its supreme good, another different religion being the way another individual or group or age finds adjustment to its ultimate cause to the end of its supreme good. In that case what would be the true and correct religion for one individual or group would not of necessity be the true and correct religion for another.

This view of ultimate cause and supreme good being relative to diverse human characters is, we think, correct. Consequently two distinctions must be made between religions, not only the distinction between the true and the false, but also between the worse and the better. A religion is true insofar as it consists of those concepts and convictions which correctly define the ultimate cause and supreme good for the individual under consideration and best enable him to make that adjustment which will yield for him his supreme good. But the true religion for another individual would require a different set of concepts and convictions if in truth the ultimate cause and supreme good for him are different. Presumably none of us has yet achieved the complete and accurate idea of what constitutes the ultimate cause and supreme good for him, nor has any of us discovered a wholly adequate method of making the required adjustment. Thus there is the distinction between the true and false and between degrees of truth and falsity, even

though the true religion for one might not be the true religion for another.

But besides these distinctions between true and false there is the distinction between better and worse. Is the ultimate cause as defined in relation to one character, say a lecherous and treacherous and selfish person as reliable and enduring and capable of yielding as much good as the ultimate cause when defined in relation to another sort of character, say a pure-hearted, trustworthy and loving person? It can be validly claimed that it is impossible to measure quantitatively the good of one person with the good of another since they are so different qualitatively. But interests may be rendered mutually inclusive by means of one system of organization or by means of another; and one system may be superior to another in the sense that it may provide for more freedom and spontaneity, more variety and interaction, more mutuality and at the same time more innovation, among the included interests. Living systems of human interest are never fixed and finished. They are always growing and changing. To grow means to become inclusive of greater number and variety of interests. One system of interest is better than another because it has greater capacity for growth.

It might be claimed that there is no just ground for trying to induce a person to change to a system having greater capacity for growth, if he prefers the more limited one. But his preference may be due to an illusion, as is often the case. If human nature be so constituted as to require indefinite growth, and if any system in time becomes cramping and frustrative to human nature when the system does not have sufficient capacity for growth, then the man who prefers a system with limited capacity for growth does so under an illusion. He prefers his system either because he does not

know its capacity for growth is limited and that consequently it will in time frustrate his multiplying needs, or else he does not know that his own human nature is of such a character that it will in time outgrow the system he prefers. When preference is thus based on illusion it is right and good to induce people to change their preference. In fact we do this constantly. Education consists very largely in doing this. Cultural education consists in persuading people to cast off a cramping system of interests, or one with limited capacity for inclusiveness, and inducing them to adopt a more inclusive system or one with less limited capacity for increasing inclusiveness. This demand of human nature for increasing inclusiveness in its system of interests we have frequently defined as interaction with an ever wider and richer environment.

The methods and motives back of much proselytizing have no justification. The way much missionary enterprise is carried on, and the reasons which lie back of it, are altogether wrong. But granting the error and the evil in much missionary enterprise, still missionary effort of the right sort is not only justified, it is one of the essential and urgent requirements and goods of human living.

There are three reasons why missions and all efforts to win adherents to a religion are a great and urgent good. The first is that one religion may be more true than another in the sense previously indicated. That means that the concepts by which one group defines the ultimate cause and supreme good for its system of interests may be more nearly correct than the concepts by which the adherents of another system of interests define their ultimate cause and supreme good. Hence the latter can be saved from the disastrous consequences of their error by coming over to the first system. The religious

term for casting off in this way one system of interests with its attendant beliefs, and adopting another, is conversion. It involves change in that system of interest which actuates one's life as well as change in religious convictions.

It may be that the other man's religion is the true one, while my beliefs concerning ultimate cause and supreme good of my system are mistaken. But the best way for me to find that out is to become acquainted with the beliefs and interest systems of others. When missionary endeavor and "soul-saving" is conducted in the right spirit it leads to that mutual understanding and interchange between diverse systems and beliefs by which alone we can hope that the most true religion may be developed or will prevail.

Another fact that justifies missionary effort is that one system may provide for more variety and development of interests, combining greater mutuality with more liberality. Here again it may be that my religion does not sustain the system of interests which has greatest capacity for mutuality and liberality. But the only way I can find that out is by establishing sympathetic mutual understanding with people who sustain other systems of interest. I can achieve this sympathetic understanding not merely by studying books about different religions or meditating upon them. I can attain it only when I go out with love and zeal to acquaint these others with my religion and learn of them what may be their religion or their way of sustaining their lives without religion. For this reason, and in this way, zeal in trying to convert others to my religion is a necessary part of the best life and the best religion.

Finally, suppose it would always hold that diverse individuals, groups, races and ages should require dif-

ferent religions. Still no inclusive system of interest, and hence no religion, can provide for progressive increase of interests with maximum mutuality and liberality among them unless it enters into fullest coöperation and deepest community of mutual understanding with others. But this coöperation and mutual understanding between religions and systems of interest can be achieved only by this endeavor called missions and "zeal to save," when these are conducted in the right spirit.

We do not believe that human life, which is another word for human interest, can become continuously inclusive of more interest, nor even maintain its present level, unless the diverse systems of human interest constantly develop an overarching and all-inclusive system. We say "constantly develop" because human life or human interest is never finished and complete. New interests are constantly arising. Old interests are constantly being modified. And new interests generally arise as divergent from the established system of interest, or they break away from the system in order to develop. But they must ultimately be brought back into an inclusive system in order to win for themselves the support of this inclusive system and receive the stimulus of organized interaction with other interests.

Each individual, group, race or age should be free to break away from the all inclusive system, and within bounds produce chaos if need be, in order to make its own unique discoveries and develop its own peculiar potentialities. But these discoveries and developments cannot go far nor satisfy the individual most fully; and they will fail to make their full contribution to human living as a whole if they do not finally turn back into some sort of organized interchange and interaction with the rest of human life. In this sense human life must constantly construct and reconstruct a total all-inclusive

system if it is to attain its supreme good. For this reason men must achieve and maintain a religion which is common to all if mankind is to attain the supreme good in the sense of bringing to fulfilment the most inclusive system of interests. But this common religion must provide for utmost diversity, spontaneity and freedom of individuals and groups. There should be, then, in this sense, one common religion for all men. Missions of the right sort work toward that end.

We have suggested that the ultimate cause for one system of interests may be different from that of another and hence the God of one man or group with its peculiar system may not be the same as the God of another. In one sense we believe this to be correct and in another sense not. God, or ultimate cause, defined as that structure of the totality of all being which determines the bearing of that totality upon my established system of interests, is diverse for different individuals and groups insofar as their interests are diverse and insofar as they have no inclusive system overarching all. But there is another aspect of the ultimate cause. The ultimate cause is also that condition which underlies all these diverse systems of interest. It is that out of which different systems arise as different types of response are developed out of the mystic experience, as described in the previous chapter. God in this sense underlies all these diverse ways in which the universe may bear upon diverse systems of interest. God in this sense is the object of extreme mystic experience wherein all specific response giving rise to a determinate system of interest is resolved.[2]

In one sense, then, God, or ultimate cause, is the struc-

[2] Approach to ultimate cause in this sense, by way of mystic religious experience, is only approximate, since the organism would dissolve if complete disintegration ensued.

ture of the universe as defined by its bearing upon some determinate system of interest. In the other sense God is that undefined, undiscriminated, but stimulating totality in response to which I may develop various sorts of interest, each different sort involving a different world structure, since world structure is determined by the bearing of the world upon any given system of interest. God as ultimate structure of the world, when structure is defined by the way the world bears upon different systems of interest, will be different for different people when their interests are different and not mutually inclusive. But God, as that which is experienced in the extreme mystic state, and hence as that undefined totality out of which diverse worlds may be developed by diverse systems of response, is the one God common to all men and groups and systems of interest. Ultimate cause in this last sense, as the underlying stimulating substance common to all, which is experienced when intense stimulation continues after all organized systems of response have broken down, is the one God.

There are those who claim that the supreme good is an unattainable ideal, while the best attainable good, brought about by adaptation to actual conditions, is only second best. In such case the best attainable good is not the supreme good; it is only the best to be made out of a bad situation.

But let us note what is involved in this attempt to establish opposition between the best good attainable and the supreme good which is supposedly unattainable. The best attainable good, it is claimed, is merely the best of a bad situation; while the supreme good is that which would be attainable if facts were different. We might reply that, facts being what they are, the supreme good must be that which is attainable. The so-called

unattainable good can be called supremely good only on the hypothesis that facts were otherwise. But since facts are not otherwise it cannot be the supreme good. This, no doubt, is quibbling, but it is the quibbling necessary to clarify a concept.

But let us approach the matter from a slightly different angle. What is this bad situation of which we make the best when we achieve the best attainable good? The situation is the totality of all being insofar as it bears upon our interests. The ultimate cause or condition, by definition, is that structure of the totality of all being which determines its bearing upon my interests. The supreme good is that satisfaction of the most inclusive human interests which can ever be attained by mutual adaptation between human response and this totality of all being as determined by the ultimate cause. In this sense the supreme good is the best that can be made out of the totality of all being. In this sense the supreme good must be attainable. We do not see how one can speak intelligibly of a supreme good which is not thus to be found somehow in the totality of all being.

Another way of making this claim, which we think is fallacious, is to assert that the best imaginable good is very different from the best attainable good. The best attainable good is that which the determining structure of the universe provides when we make right adjustment to it. But the best imaginable good may be quite unattainable, according to this claim, and hence entirely separate from the ultimate cause, since the latter will not provide it or sustain it under any possible adaptation which humans might make.

This sounds plausible, but we do not think the assertion will hold when carefully examined. The catch, we believe, is in the phrase "best imaginable good." Are

we to understand by "best imaginable good" a dream world? Or are we to understand that reference is made to the unattained but attainable possibilities which are inherent in this actual world?

Imagination is used in two different senses. Sometimes we mean by it a method of discovery. We mean that use of the mind by which we bring to light the possibilities of existence as distinguished from the actualities, these possibilities being what may be actualized when certain adaptations are made. This is sometimes called constructive imagination. It is the way we apprehend the possibilities which inhere in actuality—the possibility, for example, of making steel out of iron ore, or music out of catgut. On the other hand, we sometimes mean by imagination mere idle fancy. In idle fancy we dream of what might be if facts were different. In constructive imagination we apprehend what are the possibilities inherent in the actual facts when these are variously adjusted to human behavior.

It should be noted that the dream of idle fancy is itself an actual dream. If it has any good it is an actual good. It has nothing to do with possibility. The good of the dream is already attained and, like everything else in this existent actual world, is sustained by the ultimate cause and dependent thereon. Consequently, if by best imaginable good we mean the good of dreaming about something which never can be attained, then the good of the dream, which is the only good under consideration, is already attained.

But suppose we turn to the other meaning of best imaginable good. Suppose we mean that use of the imagination by which we discern goods which are not yet actualities, but may become so through the required changes and adaptations. Suppose we mean the good of certain possibilities which inhere in this world of

actuality as steel inheres in a world having iron ore and intelligent humans, or as the possibility of oaks inheres in a world with acorns, the possibility of statues in a world containing marble blocks and a Michelangelo. But here again the best imaginable good involves the determining structure of the universe and is dependent upon it. Such a good is attainable in the sense of being a possibility rather than an impossibility. This possible good can become an actual good, and will become an actual good when right adaptation is made to the actual conditions.

But still, it may be argued, may we not dream of something which would be supremely good as an actuality, but which never can become an actuality in a world constituted as this one, and the good of which lies not merely in the dreaming of it? In other words, may we not imagine a further, greater good beyond the utmost possibilities of good which this world of actuality may yield under right adaptation? And is not this greater good, which can be dreamed but never discovered as a possibility, the supreme good? Our answer to that question must be in the negative. It is impossible to dream of a better world than this except as the greater goodness of it lies either in the dream itself or in the possibility of its actualization. In the one case the good is already attained. In the other the good is genuine only on condition that it is attainable.

Suppose we test this claim that a dream world might be better than this actual world, not merely as a dream and not merely as a possibility. To make the claim specific, suppose we assume that the universal brotherhood of all men, the life of all inclusive love, is not a possibility in this world in which we live. Can we not still claim that love in this world is the supreme good, even though it is not attainable under any possible

change or adaptation? No, we cannot say it is the supreme good. We can say that it *would* be the supreme good *if* facts were of such a sort as to make it the supreme good. But with equal truth we can say that hate would be the supreme good if facts were different in such a way as to make it so. In other words, when we speak of a world in which facts are different from what they are, meaning not merely that possibilities are different from actualities, but that there is an imaginable world with different constituent facts from this one, then we are speaking not of what truly is the supreme good, but of what would be the supreme good if two times two were five and other such facts were different.

In a world where two times two makes five, where the moon is made of green cheese and the smile of a cat is able to persist after the cat has disappeared, it might be that the universal practice of murder would yield the greatest good. It might be in such an imaginable world that a murdered man would be the happiest kind of a man and the angels in heaven would rejoice over every man that was murdered. It might be in such a world that hate would yield the greatest possible good. The drug addict has his dream of how happy he and all men would be if facts were different. So also with the burglar and the covetous man and the selfish one. Each one of these dream worlds is just as legitimate an ideal of the supreme good as the other, if we allow facts to be different. But such supreme goods are purely hypothetical. They are what would be the supreme good if facts were different. Anything whatsoever can be called the supreme good on condition that the facts were so altered as to make it so. But when we speak of *the* supreme good it can only be in respect to this world with all its facts given and all its actualities with their inherent possibilities.

If love is the supreme good it can only be because the determining structure of the totality of all being is of such a character that when men make that adjustment called love they find that the most inclusive interest thus formed does find fulfilment. If the world were so formed that the adjustment called love brought on more frustration of interest than any other, love would not be good. It would be the greatest of evils. If the way of love does not yield the greatest good in this world, actualities and possibilities being what they are, then love is not the supreme good; and it is futile and nonsensical to dream of how good love (or hate and lust and treachery and murder) might be if facts were different. To say that a world in which two things equal to the same thing were not equal to each other, and the circle could be squared, would be a world of greater good than this world in which we live, is to enter the realm of the irrational. Alice in Wonderland, taken as a mere fancy, may be pleasant enough; and the fancy is a part of this actual world, involving the ultimate cause which sustains all that is. But to assert that Alice's Wonderland, if actualized into that kind of reality which is not a dream, would be better than our world of fact with all its possibilities, is to abandon all basis of reason. There is no way of making a comparison between the actual world with all its possibilities, and an impossible world. There is no possible way of supporting the claim that an impossible world would be better than any possible world. And any possible world is a world which is attainable by right adaptation of human life to the ultimate cause. In general, it seems safe to say that the dream worlds in which men delight would not be delightful if they became actual. But the dream of them, which is the only delightful thing about them, is already a part of our actual world.

In the meantime we must plunge ever more deeply into the mysteries of all being by way of experimental living in order to find out how to adjust ourselves to the ultimately determining condition of our existence in such manner as to bring into actuality the best possible world, which can be called the supreme good. To declare that an impossible world constitutes the supreme good for humankind is to make a self-contradictory statement.

Suppose, it has been suggested, some fiend sustains this world in existence and is its ultimate cause. We reply: to call the ultimate cause a fiend is to use a question-begging epithet. If the evil one is that ultimate condition which will bring humans the greatest attainable good when they make right adaptation to him, then forthwith he becomes good. For the good, in any intelligible human sense, is that which provides satisfaction of human need. The ultimate cause, no matter what names you may call it, is good if it is that condition which determines whatever measure of maximum satisfaction humans may ever attain.

The supreme good is attainable. But it can never be attained without the use of religious experience. The mystical experience provides the conditions needed for that radical kind of personal experimentation through which the supreme good must be sought. The immediate good of the mystical experience itself is not the supreme good. On this point many mystics have erred. But when the mystical experience is used to practice religious experimentation, it is an indispensable means to the attainment of the best possible world.

CHAPTER XI

The Concept of God

Much damage has been done to religion by premature finality in the definition of God. We greatly need to know what God is; and men crave this knowledge exceedingly. The easiest way to satisfy this desire is to assume a knowledge we do not have. This is very frequently done. And after this assumed knowledge has become established, they who accept it as correct and final are impatient with anyone who suggests we may be more ignorant of the nature of God than we think. But any assumed knowledge that goes beyond what we actually know merely results in producing an idol. This idol worship is very common. Perhaps a trace of it is inevitable. When it becomes overweening it chokes and smothers all genuine religion.

Consideration of these facts makes us very hesitant in attempting any extensive discussion of the character of God. We are much more concerned with the method and value of seeking personal and social adjustment to God, which is the substance of religion, than with speculations concerning what God is. But how can we adjust to God without knowing what he is? That is easy. We are constantly making successful adjustment to things without knowing what they are. Nobody knows just what electricity is. Some say it is a sort of liquid, others a kind of ether tension. Many diverse theories fly abroad concerning what electricity may be. But in the meantime we are making very successful adjustments to it, so that electricity lifts and illumines and beautifies

our lives. Nobody knows what matter is. New theories spring up every few years concerning the constitution and essential character of matter. But in the meantime the human race for thousands of years has been making quite successful adjustments to matter.

We do not need to know what this universe is in order to seek and find some fairly successful adjustment to it. In fact, all the verifiable knowledge we can hope to attain must come in consequence of the process of seeking adjustment, and not as a prior condition. By seeking through worship and the experimental processes of living that way of life which God sustains we can attain the most practicable kind of knowledge or wisdom about God. Perhaps this acquired ability to live right with God should be called wisdom rather than knowledge, for in great part it is so intensely practical and so much a matter of the pure vital process of living that it is quite unwordable and cannot be formulated into concepts. This practical wisdom is the great forerunner of knowledge in all fields. With respect to God it is practical wisdom almost altogether, rather than knowledge in the form of definite concepts, that religion has to offer. This practical wisdom is transmitted in the form of story and symbol; but each individual can profit by these doctrines, stories and symbols only as he applies them in a practical, experimental way.

Nevertheless conceptual knowledge about God, as about anything else with which we must deal, is exceedingly valuable. When conceptual knowledge is added to practical wisdom the latter is rendered much more accurate, more communicable and more improvable. When we have clear and accurate concepts of the object with which practical wisdom deals we can amplify this wisdom immeasurably and can transmit it to the next generation, and to others generally, without that fearful

wastage which always accompanies any attempt to transmit wisdom through ceremony, symbol and story without accurate and adequate concepts.

We are, therefore, as eager as anyone can be to attain conceptual knowledge about God, but at the same time are very fearful of speculations which presume a knowledge which they do not possess. The rank growth of mistaken speculation destroys the substance of religion. Yet conceptual knowledge of God, when correct, is the most precious knowledge we shall ever attain. We must seek this most precious knowledge constantly and treasure up everything that may add to it.

There has recently been published an exceedingly important study of this problem of the nature of God.[1] One of the most striking features of this study is the fact that it approaches the problem from the standpoint of the mathematician and physicist. It has been many years since any important work has been done along this line of seeking God by way of physics. Once this was the most common way of dealing with the matter. But the world became weary of barren discussions about the First Cause and the Unknowable. Such discussions had no value for religion and took the breath of life from it. Hence they fell into disrepute.

But of late the accepted foundation of the exact sciences has been undergoing a radical transformation. Consequently the aspect of the world which they present is very different. Just what they will reveal concerning the nature of the world no one yet fully knows, for the implications of the changed foundations have not yet been worked out. But this is precisely the problem that Whitehead has undertaken. This changed viewpoint

[1] A. N. Whitehead, *Religion in the Making* and *Science and the Modern World*. Also his earlier works are important for our purpose in showing the basis for his more recent thought.

afforded by modern physics provides new material for prosecuting the ancient problem concerning what God may be. In his *Religion in the Making,* and in some of the chapters of *Science and the Modern World,* Whitehead endeavors to make use of this new viewpoint to this end.

Any metaphysics that may be developed must make some pronouncement concerning the nature of God if God is understood in the sense we use this title. And any developed idea of what God may be must imply some sort of metaphysics. Hence this new attempt at developing an adequate metaphysic on the basis of the new physics brings the ancient problem of God to the front, and brings it forward in a milieu which may be far more hospitable to the implications of religious experience. Such, at least, in our opinion, is the outcome of Whitehead's thinking.

The term Whitehead uses to designate God is the "Principle of Concretion." When we understand that phrase we shall understand the concept of God he is trying to develop. We shall first state something very commonplace and trite which is involved in this notion of the Principle of Concretion, and will then go on to show the original applications and qualifications which Whitehead has given to this old idea, bringing about a result of first importance to our metaphysical and religious thinking.

The principle of concretion in its common and simple form was expressed by Tennyson in his lines about the little flower in the crannied wall: "If I knew you, root and all and all in all, I should know what God and man is." The principle of concretion means that everything that exists, as for example the flower, involves in its existence the totality of all being. This flower is what it is because all the rest of being is what it is. This

flower has its color and size and shape and all its other qualities, and has come into existence at this particular time and place in the history of the universe, because the sun has been shining these many thousands of years and will be shining for thousands of years yet to come, and because of many other factors besides. Everything which is has some share in the existence of this flower. All being comes to a focus in this flower. Everything that is or ever has been or ever will be is organized about this flower in concentric circles of relevance. Some things enter much more fully into it than others. The climate and soil in which it grew, and the gardener that raised it, have more to do with it than the molecules at the center of the earth, or Spenser's *Faerie Queene,* or the reign of Julius Caesar, or the principle that two things equal to the same thing are equal to each other. But all of these things, and the totality of all being, has something to do with the flower. Consequently all being in some measure enters into the flower. The flower "prehends" all being; the universe is "concreted" in the flower.

In describing "concretion" and "prehension" we have spoken of all things entering into every particular thing. But the word thing does not tell the whole story. According to Whitehead it does not tell the most important part of the story. What enters into every particular thing is more than other things. More important than other things, in Whitehead's view, are all the abstract forms which enter into everything to make it what it is, but which in themselves are not existent things at all. These abstract forms we might call general principles, or universals or possibilities. We have already stated one such principle: That two things equal to the same thing are equal to each other. A mathematician like Whitehead would naturally regard them highly, for pure mathe-

matics deals with them exclusively. The infinity of whole numbers is not an existent thing, but it has some kind of being. And the flower could not be what it is were it not for that number, beyond the number of all that the human mind has ever computed and beyond the number of all atoms, all electrons and the sum of all existent things. That number beyond the reach of any human mind has some kind of being and enters into the flower in some measure. The result of dividing the circumference of a mathematical circle by its diameter has some kind of being, although no mathematician has ever computed it exactly. Steel, as a possibility to be developed out of iron, had some kind of being before it was ever brought into existence, namely, the kind of being designated by the word possibility. And it would still be a possibility if human culture had followed some other line of development and men had never produced steel. The principle that two things equal to the same thing are equal to each other held true before men ever formulated it; and it enters into the constitution of everything that exists although it is not itself a thing. So it is that the total realm of possibilities, of principles, of abstract forms, enters into every existent thing to make it what it is.

But why is this entry of all being into every particular thing called the principle of concretion? Because the concrete is precisely the unification of the many into one. We often think of some particular isolated thing as being concrete. But it could not be concrete without a whole concrete world to share its concreteness. It is concrete because it has color and many different shades of color, and weight with many variations of weight under changing conditions, and hardness and temperature, all combined into one particular thing. But all these qualities enter into the object only because the encompassing

world is what it is. The color involves the sun and the sunlight and atmosphere, and much else. Weight involves the earth, the air, space-time and so on. To be concrete means precisely this entry of the many into one. It involves this organization of all being in such fashion that all participates in each and each in all. Nothing at all could be concrete if a wide realm of being were not so constituted as to come to a focus in each thing, thereby making it concrete.

Now the principle of concretion is this structure of the universe by virtue of which all being does thus come to a focus in each thing. The principle of concretion is this system of organization which makes all abstract forms and all events have some share in the constitution of any flower or grain of sand. The principle of concretion is this make-up of the universe which draws all being into the constitution of each man, each dew drop and each historic civilization. As all the angels of heaven bowed over the manger in Bethlehem, so all things that ever were or will be, and things that never shall exist but might, bow over each blade of grass and each baby's breath to make that blade and that breath what it is. And why does all being do this? Because some external agent makes it? Of course not; such an idea would be absurd. There can be no agent external to all being, and we are now discussing all being. All being does this because it is its nature so to do. This inherent nature of all being is God. All being does this because it is organized according to the principle of concretion. All being does this because of a certain order or character which pervades it. That order pervading the universe that makes it concrete is God. God is not himself concrete, says Whitehead, but he is the principle which constitutes the concreteness of things. No statement can be more brief, clear and conclusive than White-

head's own in identifying God with this order of the universe:

> It is not the case that there is an actual world which accidentally happens to exhibit an order of nature. There is an actual world because there is an order in nature. If there were no order, there would be no world. Also since there is a world we know that there is an order. The ordering entity is a necessary element in the metaphysical situation presented by the actual world.
>
> This line of thought extends Kant's argument. He saw the necessity for God in the moral order. But with his metaphysics he rejected the argument from the cosmos. The metaphysical doctrine, here expounded, finds the foundations of the world in the aesthetic experience, rather than—as with Kant—in the cognitive and conceptive experience. All order is therefore aesthetic order, and the moral order is merely certain aspects of aesthetic order. The actual world is the outcome of the aesthetic order, and the aesthetic order is derived from the immanence of God.[2]

Why is the most basic order of the universe, and the order to be identified with God, the aesthetic rather than the moral or conceptual? Because the aesthetic is most rich and full. The aesthetic is the order of concreteness. The moral and the conceptual represent the orders of certain abstract features of the world. The aesthetic order includes the moral and conceptual and much more, because it is the order of the total concrete fulness of the world. God, then, is to be found in the aesthetic order, rather than in the moral or conceptual, although

[2] *Religion in the Making,* pp. 104-105.

the two latter are included as abstract features. So also the laws set forth by the exact sciences are included in this aesthetic order, but they are even more abstract and meager than the moral order. In fact, they are a part of the conceptual order.

It is plain that in aesthetic experience we become aware of the concrete fulness of things as we do not when dealing with the world in a purely moral or conceptual way. To have an aesthetic experience is to apprehend that order in which many different features work together to make a single total cumulative effect. To appreciate music is to react to that order of the many different sounds by virtue of which they produce this total cumulative effect. The same is true of our aesthetic appreciation of a human face or a mountain or the biographical or fictitious presentation of a life. The aesthetic order is that order in which a great realm of being is compacted and focused in some particular event and object. The constitutive order of the universe, then, is not the moral nor the conceptual but the aesthetic. The principle of concretion is to be found in the aesthetic order rather than in any other.

It should be noted that Whitehead is not a pantheist. According to his teaching God is not everything and everything is not God. The whole existent world taken in its totality is not God. On the contrary God is simply this one, sustaining, all-pervading character which the universe displays, the principle of concretion, the constitutive, aesthetic order of all being.

God is both more and less than the total concrete world of things in which we live. He is less because he excludes evil. Evil is the principle of discretion or anti-concretion. It is that which runs counter to, and breaks down, the constitutive aesthetic order of the world. It is that which hinders and obstructs the participation of all

in each. Hence it is the very opposite of God and the antagonist of God. It is the destroyer of concreteness, as God is the sustainer and promoter of concreteness. Of course evil could have no being if there were no concrete world to tear down. The disordering principle of evil could have no being if there were no order to disrupt. Evil could never completely triumph, for in the very moment that it destroyed the concrete order it would destroy itself. It would have nothing on which to feed, no standing ground. Evil is a parasite on the goodness of God; but God and evil are mutually exclusive.

In respect to evil God is less than everything which is going on in the total concrete world. But in other respects he is more than the total concrete world, for he transcends the existent world, although of course he cannot transcend all being. He transcends the existent world inasmuch as he is not only its constitutive order, but also that order which pervades and gives system to all abstract forms. He is not only the God of actuality but also the God of possibility. Since all the possibilities of this world are organized according to the principle of concretion, as well as the actual world, God transcends the actual.

For these three reasons, then, Whitehead's view of God is not pantheistic: First, because he represents God not as the totality of all being, but as a certain dominant and sustaining character or order of all being. Second, because God does not include evil, evil being a certain antagonistic character or disorder that appears in the universe. Third, because God transcends the world of existence and is much more fully operative as the characteristic order of the realm of possibility, and in the realm of abstract forms generally, than in the world of actuality, although he is the constitutive principle of concrete order in both.

Let us restate Whitehead's idea of God as we have developed it thus far. The character of all being which makes it a cosmos rather than a chaos is the principle of concretion. It is the principle which gathers up all being and packs it, to some degree, into every grain of sand or flower or animal or man. He is that constitutive principle which gives concreteness to all being and hence gives actuality to the universe. He is that constitutive principle which rallies the whole universe to the making and sustaining of every concrete thing. But God is not the only principle in the universe. There are many subordinate principles. There are all the abstract forms. Above all, there is the principle of evil which is antagonistic to the concreting principle. God tends to make the universe ever more concrete. The principle of evil tends to break down its concreteness.

It should be noted that Whitehead sets up an absolute standard of right and wrong which holds quite independently of human sensibilities and feelings. Of course, humans may experience this divine and absolute goodness, and do so more or less. Also the only knowledge of it we can ever have must come through our experience of it. But it is by no means a creature of human society or human life in any form. On the contrary, human nature, human society and human life generally are but one more or less imperfect and possibly transitory expression of this divine order of goodness. There is a certain oughtness in the nature of things which is only partially actualized in our world. Evil is deviation from, or obstruction to, this rightness of the divine order of nature.

Men can become morally good only insofar as they incorporate in themselves this sustaining order whereby each shares in all and all in each. And when we here speak of "each" and "all" we do not mean merely each

human individual and all other human individuals. They are included, to be sure. But each and all here refer to each and all events and abstract forms which enter into the all-inclusive universe. To be moral, then, men must be more than moral. They must be aesthetic. And to be profoundly aesthetic, in Whitehead's sense, is to be religious.

CHAPTER XII

Scientific Test of This Concept

This idea of all being entering into each particular thing is by no means a novel thought. It is as ancient as philosophy itself. But Whitehead gives it a scientific basis which we believe is original. And by giving this scientific demonstration of the principle of concretion, he is also establishing scientifically the fact and nature of God, providing his definition of God is accepted.

This scientific demonstration is set forth in his *Principles of Natural Knowledge* and his *Concept of Nature*. It consists in his analysis of space and time. He has shown that every unit of space or time, no matter how small, involves all the rest of space and time. You cannot adequately define or conceive any smallest unit of space or time or space-time without bringing into your definition and concept all the rest of space-time. Materialism, to be sure, did deal with certain minimum units of space and time which it thought could be conceived and treated as independent of the rest of space-time and put together like so many bricks to make all the rest of the temporal and spatial totality. But materialism could do this only by involving itself in a self-contradiction which it ignored. Whitehead has set forth this self-contradiction and shown the impossibility of this materialistic presupposition. By his analysis of space and time he has established the proposition that into every unit of space and time there enters every other unit, both

past and future. Every point-moment prehends or focalizes the totality of all space-time. And since everything that exists or will exist or has existed must participate in space-time, this principle applies to all existence.

Another line of reasoning serves to show that all abstract forms must also enter into every concrete thing that appears in space-time. Space and time are computed from every different point-moment. Hence each point-moment has a different system of space-time from every other. Space-time, as used by Whitehead and by all upholders of the theory of relativity, is used to refer to all these different systems of computation which must be based upon each different point-moment. There is an infinite congeries of different systems of space-time, one for each different point-moment. This total congeries of different systems, taken in its totality, cannot be called space-time, because the term is already preempted for each system taken severally. Also, that which is calculated by the exact sciences and called space-time is these different systems taken severally, and not the total congeries of systems taken as a single totality. This single totality, which includes the different systems of space-time, but which cannot itself be called space-time, is designated by Whitehead as the order of nature or the creative process of nature. Now this order of nature is a continuous flow. There is nothing permanent in it. There are not even definite temporal moments or definite spatial points. There is nothing definable and nothing conceivable in it save as a single undiscriminated total transition. Nevertheless in this order of nature we do find objects. We know objects and deal with objects. How can this be if the order of nature is of the sort indicated? It can be, and it is, because the eternal and changeless abstract forms

enter into this order of nature and hence constitute definite objects. These abstract forms are in themselves eternal and changeless, as for example two times two is four, or the three angles of a triangle are equal to two right angles, or two things equal to the same thing are equal to each other (or any possibility which has been a possibility from all eternity and in five million years from now will be an actuality). These forms, we say, are in themselves eternal and changeless, but their part in the order of nature constantly changes. They come and they go. To-day they may be mere possibilities, to-morrow actualities.

It is these abstract forms, such as principles and possibilities, which give to nature the element of permanence and definability which is necessary in order that objects be found there.

Thus does Whitehead, (1) by his analysis of space and time, (2) by his consequent concept of creative process of nature and (3) by the abstract forms, demonstrate that all being does have this principle of order by virtue of which all enters into each.

The second distinctive feature of Whitehead's treatment of this theme is that these abstract forms vary in the degree of relevance which they have for particular things. The forms themselves never change, but their relevance to particular things does change immensely. For example the result of dividing the circumference by the diameter of a mathematical circle is an abstract form that never changes, but the relevance of that principle is very different for different things. It is much more relevant to the letter O than to the letter Z, to a healthy three-year-old baby than to a seventy-year-old man. Nevertheless Z could not be Z if this principle did not hold good, nor could the old man be a man of seventy or have a body or a mind if this principle did not main-

tain itself, because the principle is one essential component of the fabric of our universe. The same is true of any other principle one might wish to mention. The possibility of making steel out of iron ore is more relevant to razors than guinea pigs, but it has some relevance to both. The bearing which one of these abstract forms may have on the constitution of a concrete thing at one time may be less or more than what it has at another time; and the bearing it may have on the constitution of one thing may be less or more than on some other thing. That is what is meant by different degrees of relevance. But some relevance, all abstract forms must have to all things whatsoever at all times.

Every change in concrete things involves some change in the relevance of these abstract forms. That means that all abstract forms are reorganized and focalized in a different way, with every successive stage in the creative process of nature. All being, and preëminently all these possibilities or principles, are constantly undergoing reorganization and refocalization because the creative process of nature is continuous, and if the concrete world of existent things is to be maintained and the order called concreteness is to be preserved, the realm of abstract forms must constantly undergo this reorganization in adaptation to this continuous flow of nature.

Here again the peculiar providence of God reveals itself. It is God who constantly reorganizes this realm of abstract forms in order to preserve and often enhance the concreteness of each thing and of the universe. God does not do this as an external agent, for he is simply that persistent order of all being by virtue of which this reorganization constantly occurs. Because of the principle of concretion all the infinity of abstract forms assumes a different relevance whenever any new thing

comes into existence. New things could not come into existence if the infinity of abstract forms did not thus change their system of relevance. For new things to come into existence two things are needed, the onward flow of nature and the reorganization of all abstract forms in respect to their relevance to this flow of nature. When a child is born or a flower breaks into bloom or a man is murdered or a world war begins, the total realm of being is reorganized in such manner as to give all abstract forms maximum entrance into the new thing, and thus the principle of concretion maintains itself in this world of existent things. But the war and the murder differ from the birth of the child and the blooming flower in that they are of such nature that all abstract forms cannot enter so richly into them. The war and the murder render the world less concrete; that is the reason they are evil. They hinder the increasing actualization in this existent world of the principle of concretion. They are antagonistic to that divine order of love and beauty which, in most general terms, is called concretion, and in religious terms, God.

The third feature in Whitehead's treatment of the principle of concretion is what might be called levels of prehension. That is to say, some things prehend the universe more richly and fully than others. Every existent thing, no matter what it is, prehends the whole universe in some measure; but some things prehend it more concretely, more compactly. For example a human mind prehends all being more richly than a grain of sand. All being enters into a grain of sand in some slight measure, but it enters into the constitution of a mind more fully. A man of high intelligence who lives at the height of culture, who has absorbed the arts and sciences of his time to the utmost and inherited the fruits of history, focuses the universe more richly than a primitive

savage. Above all, if this cultured man is a great lover of men, and so a prehender of prehenders, through love absorbing the riches of other minds, and if these other minds are also cultured and loving, we have the highest degree of prehension. In such a person we have the divine order of concretion reaching its highest degree of actualization in this existent world, so far as we have knowledge. The best man in the best society is the most concrete thing we can have in this world. He is most divine.

In these levels of prehension and progressive concretion of the world we have an absolute measure of progress and of value. Progress occurs and value is magnified insofar as all being is concreted. One level of existence can be said to be higher than another, or more divine, according as it prehends more richly than another. Man is higher than animal, animal than plant, and plant than sand, insofar as the former in each case renders existence more concrete by bringing all being more compactly to a focus. Since God is the principle of concretion, the existent world can be said to be more divine according as existent things do thus focus the universe more fully, through the evolution of society or through the efforts of individual men or through natural evolution or in any other way. In this sense man is more divine than the animal, the animal is more divine than the plant, the plant than the grain of sand. Some stages of the world's development display more of the character of God than others, inasmuch as they focus the world more concretely.

Thus progress and value are measured in terms of God or the divine order. God is that arrangement of all being which makes for concretion, but which is never completely actualized here. But God is increasingly actualized throughout an infinite progression. After

unimaginable aeons of time, during which the divine order has entered progressively more and more into our world, this realm of existence will be so much more spiritual and so much less physical, says Whitehead, that the world as we know it to-day will be prehended in that far distant world only as a tiny ripple. By spiritual I understand him here to mean the maximum community or mutuality of participation among all parts and features of the world. It is the same as concretion. Love is more divine and more spiritual than hate or indifference, or than knowledge without love, because it brings the world more fully to a concrete unity.

CHAPTER XIII

Religious Test of this Concept

We are now prepared to consider the most important question in this discussion of the concept of God: On what grounds, if any, is Whitehead justified in identifying God with this principle of concretion? What criteria can we use to test the adequacy of any concept of God? There are three tests we would apply: (1) Does the concept designate that something in all being upon which human life must depend and to which humans must adjust, in order to attain the greatest possibilities of good and escape the greatest possibilities of evil? (2) Does it deal adequately with the problem of evil? (3) Is it true to religious experience?

The principle of concretion seems to meet the first test. The greatest good, the best life, is that joy and mastery, appreciation and efficiency, which reach their highest point when one is adaptive and responsive to, and so prehensive of, the widest and fullest range of all being. If we want to put it in biological terms, it is that life in which the organism interacts most intimately, most extensively and most continuously with its total environment through adequate operation of mind and body. It is that life in which there is most sensitivity to the fulness of the world about us, most far-reaching adaptation to it, most appreciation and understanding of it. Such a life is attainable only as we avail ourselves of that order of all being which sustains and pro-

motes concretion. This principle of concretion we must seek in all things at all times; we must appropriate it and we must adjust ourselves to it, if we would attain, and increasingly attain, this best life and greatest good.

Again if we define God as love, the principle of concretion meets the test. For what is universal love if not the ordering of all being in such a way that it can enter most fully into the existence of every particular thing? When we love any person or object we bring all our world, so far as possible, to focus in that one and we identify ourselves with him. In a word, we prehend him and his world. We establish a most profound community between us. So we can say, the community of all being in each particular thing is certainly the principle of love insofar as love can be conceived at all beyond the limits of human personality. Since God is more than human, since he is a factor which operates throughout all being, I cannot conceive of any better way of stating accurately the character of this universal love than to call it the principle of concretion. Within the limits of human intercourse this community of lives, this prehension by each of the interests of all, and this focusing of all upon the life of each, is love and it is also the principle of concretion. If God be the principle of concretion in the universe, then love is the fullest actualization in human life of the divine order and the best adaptation man can make to that which is God.

Still again, if we define God as beauty the principle of concretion is the best description of him. For is not beauty precisely this entrance of all parts into each part? A beautiful thing is that in which each bit brings all the rest to a focus in itself. Beautiful lines are lines in which each line participates in all the others. Harmony, rhythm, beautiful forms, are different ways of

indicating the principle of concretion. Nowhere do we apprehend so fully the concrete in sensuous form as in the beautiful object.

So we judge that if God be beauty, if God be love, if God be that which sustains, makes possible and promotes the most secure and satisfying and abundant life of man, God must be the principle of concretion.

Let us now turn to the second test of this view of God. One of the most crucial tests of any concept of God is the way it defines evil in relation to God. Perhaps more ideas of God have foundered on the problem of evil than on any other. Therefore we must consider Whitehead's treatment of evil and the way his concept of God is related to it.

He defines evil, first of all, not in relation to human interests and desires alone. To be sure, humans do experience evil, and we can never know anything about it except as it enters in to frustrate our interests. But the ultimate standard by which evil is measured and defined is the divine order of the universe, the principle of concretion, not human wishes.

Evil is anything which hinders the prehensive capacity of any particular thing. Evil is antagonistic to that principle which makes existence possible. It is destructive of concrete existence. It is plain that lying, stealing, infidelity—all forms of moral wickedness—hinder or destroy that order and community which is concreteness.

The more fully any object prehends the rest of being, the more complicated and delicately balanced must all its adjustments be, in order to accomplish the participation which it has in the fulness of being. A grain of sand prehends all being so meagerly that its adjustments are not difficult and complex compared to those of a flower, and a flower's are slight compared to a cul-

tured human mind. And that social organization which sustains and promotes the richest sort of prehension is the most subtle and complex in its organization and in the interaction between persons and between persons and the rest of nature. Consequently the higher we rise in the levels of prehension, the greater place there is for the destructive works of evil. Only in modern society can we have such evils as the last great war. And only in such a sensitive and prehensive personality as Edgar Allan Poe can we have such tragedy as his life presents. The more good is built up, the more good there is to tear down; hence the more opportunity for evil. Since evil is the destruction of good there can be no evil unless there is first the good. The opposite, however, does not hold. Good is not dependent on evil. Evil is not required in order to provide for the increase of good, although good (or God, the principle of concretion) may and does turn evil to good account.

Evil, then, is parasitic. It cannot stand on its own feet. It can thrive and flourish only when there is good to sustain it. The world is based on the good. The concrete world would have no existence were it not for the principle of concretion which constitutes the good. Good and concrete existence are identical. The concrete order of the world is good. Evil tends to destroy and break down this concrete order, and hence all concrete existence. If evil had its way it would destroy the concrete world so completely that there would be nothing left but the abstract forms, which are neither good nor evil. If evil had its way it would destroy the concrete world so completely that evil itself could have no existence. If evil should triumph it would destroy itself. But as a fact evil cannot attack the universe as a whole. It can only attack some level of prehension and so break it down that it disintegrates into some lower

level of concrete existence, which is still good and concrete, but to a lesser degree. Thus a high civilization may disintegrate into savagery; the human may become an animal; the living animal may disintegrate and become grass and flowers. Vegetation may be resolved into gaseous and mineral substances.

Evil is essentially unstable because it is disorderly, opposed to that order that sustains the existent world in being. Pain, mental anguish, misery and suffering in all its forms are the struggle of the concrete good to maintain itself at some level of prehension, or attain some higher level, in opposition to the disintegrating ferment of evil. But when some level of concrete good has been completely destroyed, and has been resolved to some lower level of goodness, the process of disintegration with its pain and suffering generally ends. The grass grows peacefully over the grave, or the brutish men live contentedly amid the ruins of a destroyed civilization, or wild beasts flourish where men once had their fretful day, or the cold planet spins on its way after the fever of life has been eliminated from it.

It is to be noted that evil is something positive and aggressive, not merely the lack or absence of something. But God is not evil and there is no confusion of good and evil. Insofar as the concrete world exists at all, it is due to God, the principle of concretion and order. God may be more or less fully present in the existent concrete world, inasmuch as there can be degrees or levels of concretion and prehension. But evil is the destruction of that which is sustained and constituted of God. God excludes evil, evil excludes God. God does not create evil nor sustain evil, except as a parasite is sustained. Evil could not exist without God's good to provide for it a standing ground; but the good alone is of God.

So we believe Whitehead's concept of God meets the test that arises out of the problem of evil.

The third test of any concept of God is religious experience. An idea of God which is not true to religious experience is not worth much. Does Whitehead's concept of God meet the test of religious experience? We think it does.

Whitehead claims that the religious experience is of the aesthetic order rather than of the moral or conceptual. He means it is a state in which there is a high degree of conscious sensitivity to the concrete fulness of things which in other states we ignore. It is wide awareness to that delicate, subtle, rich fulness of our interaction with environment which does not ordinarily enter consciousness. But why do we become aware of it at these rare moments of religio-aesthetic experience? Because, so Whitehead would seem to suggest, at these moments the various factors that are brought to bear upon us are so ordered as to produce a single, total, unified effect. At such moments the principle of concretion is more fully actualized in our immediate environment. At such moments the world about us, in some phase of its existence, comes more poignantly to a focus in its bearing upon us. The cumulative working of many things is more finely ordered to produce a total effect and so jars open our consciousness to wide awareness of this mass of experience, with its pathos and beauty and tragedy and luring possibilities. And this order of things reveals God because God is precisely the principle of concretion.

When Whitehead distinguishes the aesthetic from the conceptual and moral we do not understand him to mean that these two latter are necessarily excluded from religious experience or from the aesthetic itself. "All order is aesthetic order, and the moral order is merely certain

aspects of aesthetic order. The actual world is the outcome of the aesthetic order, and the aesthetic order is derived from the immanence of God." [1] As the moral order is one aspect of the aesthetic, so also is the conceptual. But the moral and conceptual orders, taken by themselves alone, are too meager and impoverished of the rich content of concrete fact to give us an adequate sense of the principle of concretion.

In conceptual experience the concept controls awareness to such a degree that one is receptive only to those elements and features of experience which are pertinent to the concept. Scientific investigation is the best example of this. But in aesthetic experience the concept is submerged and sometimes almost lost in the wealth of concrete experience. In the conceptual the concept is master, determining what shall be admitted to awareness. In the aesthetic the flood of experience is master, using the concept merely as a means for keeping the mind conscious and preventing it from passing into a state of trance. In the conceptual the concept leads immediate experience with a ring in its nose. But in aesthetic experience the concept merely hangs on to the tail of immediate experience.

The religio-aesthetic experience is distinguished from the moral in a similar fashion. Moral experience is practical. It excludes everything from consideration which is not conducive to the fulfilment of some well-defined undertaking. In aesthetic experience the practical or volitional cannot be altogether excluded, but it is subordinated to the service of enlarging one's receptivity to the richest content of experience. Thus the difference between the moral and aesthetic is analogous to the difference between the conceptual and the aesthetic.

These facts may help us to see how it can be said

[1] *Religion in the Making*, p. 105.

that the religious experience is not primarily the conceptual or moral but is more on the order of the aesthetic; for only through the latter do we have sufficient awareness of the concrete whole of things to get any sense of God. This seems altogether reasonable if God be the principle of concretion. That convergence of all being upon the individual, by which all things come to a focus in him and God becomes an intimate and vital actuality, requires an experience more rich in content than the moral and conceptual alone can afford.

It would seem that Whitehead's concept of God not only meets all the requirements of religious experience but illuminates and justifies that experience.

It should be noted, however, that the term aesthetic has certain connotations which must be avoided if its application to religious experience is to be justified. It is by no means limited to the appreciation of works of fine art. Rather it is first of all a certain way of apprehending nature in its original state. It is a way of apprehending the concrete fulness of nature, including human behavior and other minds. Fine art does certainly yield aesthetic experience, but the most profound apprehension of the concrete fulness of reality is beyond the limits of the fine arts. Preëminently it is through intercourse with other human minds that we discern the principle of concretion entering most richly into our world. Love between humans is the principle of concretion in nature at the maximum. Whitehead himself describes religious experience in the following words: "Mothers ponder many things in their hearts which their lips cannot express. These many things, which are thus known, constitute the ultimate religious evidence, beyond which there is no appeal."

It is plain that these "many things" constitute that rich concretion, that focusing of much reality, which

only the loving heart can discern when pondering over what has been seen and thought and felt and heard in relation to the beloved. Instead of using the word aesthetic to describe religious experience he might have used the term love; only love is subject even more to misinterpretation than is aesthetic.

But when we speak of this social character of religion we seem to run counter to a view upon which Whitehead insists throughout his work. Religious experience, he says, can attain depth and greatness only when it is solitary. He even goes so far as to say that religion is what a man does with his solitude. This solitary character does not apply to the cruder and more primitive types of religion. They are almost altogether matters of social convention, crowd thinking and crowd feeling. But when religion reaches the higher levels of its development, it ceases to be social in this sense of being a matter of crowd-mindedness and social convention. When mature religion does begin to display the phenomena of crowd psychology it has suffered degradation.

But in saying that religion is a matter of solitude, and becomes great only in the solitary individual, I think Whitehead is again subject to misunderstanding. We do not think he means to assert that religion is anti-social. Perhaps his meaning can best be set forth by taking some analogies from art, from scientific thought and invention, and from love between humans.

In a work of art, such as a poem or a novel, we have something that in one sense is highly social. But in another sense it is an achievement of the solitary individual. No great work of art was ever produced by several people working together upon it. Only the solitary individual can achieve superb artistic production. And yet art is not great, indeed it is not art at all, if it does not express a deep community of mind between

the artist and his fellow men. It must be something which they can see and feel and think in common with him. It must be a concretion of the experience of many men. It must be an exposition of some deep community of thought and feeling among humans.

Thus a poem or a work of fiction is both a solitary achievement and also profoundly social. Such deep community of minds could never have been achieved had the artist not isolated himself and done his work in solitude. Great art, like great religion, is what a man does with his solitude.

The same is true of scientific research, of philosophic investigation and of invention. The scientist, the philosopher or the inventor must have association with other minds working in his field. He must know their works, discuss the problem with them and be well acquainted with all that has been thought and done along the line of his research. But the final production, the ultimate feat of creation, the integration and focusing of all these works and thoughts into a unique discovery, is an isolated, individual matter. It is what he does with his solitude. The same is true of great moral and spiritual discoveries. These have been achieved by prophet and seer going apart from the crowd and spending forty days and nights in the wilderness, or on Mt. Sinai, or in the Arabian desert or sitting under a banyan tree in India. And these discoveries are often so isolated that it requires several generations for the mass of mankind even to recognize that a discovery has been made.

These works and discoveries, scientific, moral and spiritual, including the great works of art, while the product of what a man does with his solitude, could never have been made had not the individual mingled with his fellow men sufficiently to learn what they were thinking

and feeling and to gather up the fruit of the culture of his time.

Why is it that the individual must withdraw from physical association with his fellows in order to enter into more profound community with them? Why must he isolate himself in order to discover the principle of concretion in the social life of his time and in the world as a whole? I think the matter is not very mysterious. One must isolate himself in order to digest what he has seen and heard and felt. In order to ponder these many things in his heart and gather up their larger significance and integrate more profoundly the meanings of his associates and the culture of his day, he must be alone. One must be free from further social contacts in order to get the deeper significance of the contacts he has already had. The tones of voice that he has heard, the glance of the eye, the tense face, strained posture, quick movement, these and a thousand other fleeting impressions that shower upon us as we mingle with our fellows have a wealth of meaning, if only we can catch it. And unless we do catch it we never can enter into the deeper sympathy and community with humankind. Unless we get this depth and wealth of meaning we shall never read their hearts, nor reveal our hearts to them, nor unite their lives with ours. And this is just as true of lovers as it is of any others, whether the lovers be parent and child, or Jesus and his disciples, or Socrates and Plato, or man and woman. The lovers must separate if ever their love is to become great; and in solitude they must let these impressions seethe and brew until they divulge their meaning. In the tangled and struggling lives of humankind the larger meanings are choked and confused; they are inarticulate and undiscerned. Especially the great meanings of life are strangled and struggling for utterance. The prophet and poet are able

in solitude to discern and release these meanings and render them vocal and manifest so that humankind can join in profound community through common appropriation of them.

Constant physical association with our fellows tends to make us superficial. We are so constantly jerked about in adapting ourselves to the transitory and superficial matters that we never have a chance to discern the deeper needs and yearnings of the heart. We become marvelously skilful in getting along with people in such a way as to avoid offense and be fairly pleasant. We become oily and suave and very adept in avoiding every social difficulty. But there is no deep sympathy, no profound understanding, no concretion of the richer and greater sort such as mothers know when they ponder many things in their hearts.

It is for this reason, I am sure, that religious experience must be a solitary achievement. One must be alone in order to discern that principle of concretion which is God and which is operative in all nature, but preëminently in social intercourse and community of minds. Religious experience which arises only in physical association with others is either primitive or a degradation of religion. We must have physical association with others to provide us with the raw materials out of which to attain religious experience. But the experience itself, when deepest and most fruitful, comes in solitude ordinarily. That merely means that, in order to discern the principle of concretion as it works both in the social world and in the sub-social, one must be free from the jerk and jostle of particular things coming one after another, in order to get some sense of the community and totality of things and to discern in them that order which is God, which makes each have some share in the existence of all and all in each.

We have tested Whitehead's concept of God by applying it to the practical problem of increasing human good, to the problem of evil and to the requirements of religious experience. In each case we have found that it met the test. It seems to be a very valuable contribution to our idea of what God must be.

We have one word of criticism, not so much of his concept of God but of his view of religious experience. And here it is not the substance of his thought that we attack but rather the word he uses to indicate religious experience. The word aesthetic has connotations which make it very unsatisfactory. It may be, however, that no better word is available. We agree that religious experience does have something of the aesthetic order in it. But we would go farther and say that religious experience is more aesthetic, in the sense of being richer and more profound, than the aesthetic experience itself as ordinarily understood. Also the word aesthetic when applied to religious experience must include the sense of dread and horror which comes to men when they feel that the possibilities of human weal and woe are far vaster than they had dreamed. This is a very common form of religious experience.

The word aesthetic has some very serious deficiencies as a term for designating religious experience. Chief among these is the fact that it does not readily connote the strenuous practical nature of religion and above all that desperately experimental character which is expressed in the word faith. Religious experience brings to men a sense of unknown but awful ills, impending and possible, and also a sense of undeciphered but glorious goods, also possible. The religious behavior which issues from such experience is a tremendous striving to avert these ills and attain these goods. This striving must necessarily take the form of desperate

experimentation. In the earlier stages of religion, which continued through thousands of years and from which some religions have not yet emerged, these experiments are most wild and grotesque. They may take the form of burning to death the one you love most, or throwing him to the crocodiles, or torturing your own mind and body until you are broken and crazed. But as time goes by the negative results of these wilder religious experiments become manifest, and men seek other and more profitable ways of seeking after the greater goods and averting the greater ills. Also the technique of religious experimentation is gradually perfected, so that we depend less and less upon subjecting mind and body to gross physical experiments, and more and more upon mental attitudes, imaginative constructions and symbolic representations to discover what may be the outcome of certain ways of living and what way is best adapted to God. But all vital religion must make use of the experimental method, for this is the only method by which new discoveries can be made. This is preëminently true when the discovery sought is that adjustment to God which is the best way of life.

The word aesthetic, because of its connotations, does not allow adequate recognition of this strenuous, practical, experimental character of religion at its best. Nevertheless it serves to correct a very common misunderstanding of religion in which the moral and conceptual are magnified to the exclusion of the aesthetic. And it sets forth most beautifully the correlation between the Principle of Concretion, which is God, and religious experience.

Whitehead does not ignore the conceptual factors in religion. On the contrary he magnifies them. He claims that religion at its best is a way of investigating the universe. It differs from all other forms of investiga-

tion in the kind of experience which yields the data for its inquiry. Through profound religious experience certain intuitions are attained. The problem of rational religion is to test and correct these visions, amplify and generalize them, and integrate them with all other knowledge until there is demonstrated some truth concerning the all-inclusive universe. In Jesus, for example, there is a "first-hand intuition into the nature of things." Facts "are seen with immeasurable innocence." The problem of philosophy, so far as it is concerned with Christianity, consists in developing a metaphysic which will incorporate these intuitions and others supplementary to them. Religion, even more insistently and profoundly than science, must search for objective and certain fact concerning the inherent nature of things. For God is in the inherent nature of things.

CHAPTER XIV

Religion and Truth

Truth is the correct designation and description of features of the world. A designation and description is correct insofar as certain anticipatory adjustments are fulfilled according to expectation. There may be all degrees of refinement in these adjustments and the conditions under which they are fulfilled, but the ultimate test of truth can be only the fulfilment of some anticipatory adjustment according to expectation. The designation and description must be symbolized. These symbolized meanings, describing something which is verified by fulfilment of expectation, are concepts. In this sense and under these limitations concepts constitute truth.[1]

Because of the intimate connection between truth and the concept, we cannot discuss truth and its bearing upon religion without first getting clearly before us the nature and uses of the concept in human living. Let us, then, briefly sketch the relation between concepts and human living generally; then we can proceed to trace the connection between truth and that particular phase of human living called religion.

Concepts and the use of concepts are not the whole of human living, but they are one exceedingly important part. Two errors have frequently been made in this matter. Some have unduly magnified the place of con-

[1] While belief can be verified only by fulfilment of anticipatory adjustments, nevertheless it is quite possible to know the truth about past events. How this is accomplished is very well stated by Ralph Barton Perry, in his *General Theory of Value*, pp. 339 ff.

cepts and have failed to note other very important factors in human life. Still others have unduly minimized the concept, failing to see that truth and all the values of truth, together with other values, are impossible except by way of concepts. We must try to get concepts and human living in right perspective. To that end we shall first indicate the biological phase of life, and pass from that to the concept.

Human living can be described in terms of organism and environment. The whole world makes a certain impact upon the organism and the organism is more or less sensitive and responsive to it. Some of this total impact upon the organism enters awareness. That is to say, we are more or less vaguely conscious of it in the form of sensuous experience, emotions, impulses. This awareness fluctuates greatly both in quality and scope. Sometimes it is a vague, confused mass or stream of consciousness in which feelings and undiscriminated sense experiences are merged without any sharp distinctions. At other times certain features of sense stand out quite distinctly against an obscure background.

But whatever form our conscious awareness may assume, the main point to observe is that we are never more than very imperfectly and partially aware of the total impact of the world upon the organism. The sensitivity and responsiveness of the organism is far more extensive than the range of our conscious awareness. For example, almost all that response of the organism which is under control of the cerebellum is unconscious. We never become conscious of anything until the organism has already received the stimulus and started to make a response. Consciousness is a certain phase of a total response, the consciousness arising sometime after the elementary responses have been initiated, appearing at that stage where these elementary impulses are under-

going organization into a more adequate system of adaptive adjustment. A response scarcely involves consciousness unless the cortex is activated.

> The cerebral cortex ordinarily is not activated by simple uncomplicated nervous impulses coming directly from the periphery; but it is called into play by activities going on in lower correlation centers and it articulates with these as going concerns. Sense impressions are received and combined in subcortical centers, and there resolved into actually operating or incipient motor responses before they can get through to the cortex at all. The cortex is not reached by these nervous impulses if the situation is one for which the organization of the lower centers is adequate; that is, if the standardized reaction of reflex or instinctive type gives a satisfying result. Otherwise, collateral efferent pathways from the lower centers to the cortex are activated and the cortex participates in the reaction.[2]

"Our conscious experience—even the simplest of it—is of total situations, not of hypothetical simple elements, whether of sensation or of effect or any other logical abstraction."[3]

In that total process of interaction between organism and environment which constitutes human living there are, then, three things which can be distinguished: first, the impact of the whole world upon the organism; second, the sensitivity and responsiveness of the organism to this impact; third, that portion and phase of this sensitivity and responsiveness that enter conscious awareness. The whole world that makes its impact upon the organism may awaken all degrees of responsiveness

[2] Herrick, J. Hudson, *Brains of Rats and Men*, p. 260.
[3] *Ibid.*, p. 250.

in the latter. Some organisms are much more sensitive than others, and the same organism may be much more sensitive at one time than another. But even at its best our sensitivity falls short of meeting the requirements of that interaction with the world in which we would achieve complete mastery and appreciation of our total environment. But if sensitivity falls short, conscious awareness is very much more narrowly limited.

There is still a fourth factor entering into this interaction between organism and rest of the world in addition to the three mentioned—the impact of the world, the sensitivity of the organism and the conscious awareness. This fourth factor is the concept.

What, then, are concepts, and what are they good for? We shall not try to invade the higher realms of logic where the essential nature of concepts in the abstract is argued. We shall try to consider them only insofar as may be necessary in order to discern what may be their function in human living.

Concepts are intellectual devices which enable us to do a number of things. First they enable us to separate out from that confused mass of feeling which constitutes our awareness certain features, and to discern these features in clear-cut and definite distinction. For example, the color blue, when we give our attention to it, seems to stand out in clear distinction from the rest of that total mass of the world which we are experiencing at the same time. But the reason it does this is because we have learned to distinguish it and hold it at the focus of attention. This learning was accomplished in early childhood and we have quite forgotten the laborious process by which it was accomplished, but it was learned nevertheless. And the concept greatly helped us in this learning. When we learned to discriminate the word blue from all the other sounds which poured

from the mouths of our relatives, and learned the meaning of that word, we had acquired a concept. This concept was an immense help in enabling us to carve out the color blue from the totality of experience at any given time and focus our attention upon it. So likewise with all other features of experience.

We can learn to distinguish certain features of experience within the confused totality even without concepts. This must be so, otherwise we could not distinguish those first words of early childhood which were the first symbols conveying to us the meaning which constitutes the concept. Those features of experience for which we have a constitutional susceptibility—some would say an instinctive interest—can be distinguished with more or less clearness without concepts. The vocal sounds of other members of the species are generally of this sort. But concepts enable us to distinguish these features much more clearly and accurately and to accomplish the distinction much more readily. Also they enable us to select and focus our attention upon many features which we never could discriminate from the mass of feeling without the help of concepts.

A second use of concepts is to enable us to deal with features of experience which lie beyond the scope of our immediate awareness. We can deal with people in China by way of concepts, although China may never come within the bounds of our perception. By means of concepts we can prepare ourselves for events that will happen to-morrow; we can help prepare the world for things that will happen a hundred years hence, which will never enter our immediate experience. And by means of concepts we can profit by things which happened many centuries before we were born.

A further use of concepts is that they enable us to infer from the data of experience the existence of certain

things which never can enter human awareness directly. Such, for example, are the ether waves (if there be ether waves) and the timeless transition of electrons from one orbit to another (if the quantum theory be true). The two kinds of happenings used as illustrations may not be actual occurrences going on in the world round about us. But if they are actual, we could never know them except through that use of concepts by which we infer from what is directly experienced to that which lies beyond the reach of all direct human experience whatsoever but is nevertheless actually existent.

The three uses of concepts which we have been describing constitute their truth value. Concepts are the only means by which we can attain to truth. They are, therefore, of immeasurable value. Truth consists of a verified or verifiable belief, and every belief involves a concept. Without concepts there can be no truth. Without concepts there is reality. Without concepts there is experience in the sense of that interaction between organism and environment, which we have described, with organic sensitivity and response. Also consciousness occurs without concepts. But without concepts there cannot be truth; there cannot be knowledge.

Truth is a verifiable belief, we have said. A belief is verified by testing it experimentally and observing the consequences. For example, I believe there is a chair beneath me. Ordinarily my observation of the bodily sensations I experience as I sit is sufficient to justify my belief. Other experimental operations such as turning and looking, feeling with the hand, etc., provide further evidence to support the belief. There is no absolute standard to determine just how much evidence is required before a belief can be accepted as verified. Perhaps there is no absolute verification. Also concepts may be more or less true, understanding by truth the

accuracy with which concepts entering into a belief designate and describe some existing feature of the world.

Thus far we have been describing the truth value of concepts. Without them we could not know what is going on in the world round about us; we could not know what has occurred in the past nor what will occur in the future. All this constitutes their truth value. But concepts also have other values besides serving as means to the achievement of truth.

Concepts have an aesthetic value. They serve to quicken consciousness, make it more vivid and more rich in content. Concepts stir our emotions, bring forth mental imagery, fill us with joy or sorrow. And all this concepts may do without any regard to their truth. Such, for example, is the use of concepts in fiction and all fine art. Of course true concepts have aesthetic value also. The fact that a concept is true or false may make a tremendous difference in the state of consciousness which it produces in us. All that is granted. But we are saying that in addition to their truth value concepts may and do have great aesthetic value. Dreaming is the work of concepts, and for some this is the chief delight to be found in living.

There is still a further use of concepts which may be roughly called their organizing value. They serve to indicate by implication a whole system of concepts. The same concept may be both descriptive and implicative. In fact that is always the case. But its descriptive use may be very different from its implicative use. The mathematical concept which describes the height of a tree also implies the infinite realm of numbers, their division, subtraction, multiplication and addition to infinity. But the infinite system of numbers is not the same as the height of the tree. When I talk about the

abstractions of pure mathematics I am not talking about any particular tree; I am talking about the implicative use of concepts.

This mutual implication which concepts sustain is something very different from their truth, if by truth we mean the correct description of some natural event such as the tree. All the concepts of pure mathematics are implicative rather than descriptive. Hence they are not true in the sense of designating or describing any of the characteristics of natural events such as carrots or telephone poles. They may be used to designate carrots and telephone poles, but in pure mathematics, as distinguished from applied, they are not so used. The concepts of pure mathematics, then, are neither true nor false; they are simply implicative of one another. If one insists that any such system of mutual implication constitutes truth he is, of course, welcome to do so. But if he does do so, he must recognize that the designative and descriptive use of concepts is something very different from their implicative use alone. The word truth cannot be used in both these senses without hopeless ambiguity and confusion. To avoid the ambiguity arising from using the same word in two such radically different ways, we limit truth to the designative and descriptive use of concepts. This is the way truth is understood in the descriptive sciences and in much of the usage of common sense.

Let us now turn to a misuse of the concept. We have been setting forth its rightful uses and values. But its misuses must also be noted in order to distinguish them from its proper use.

Concepts give rise to illusion and error. Without them there would be no error, as there would be no truth. Perhaps the greatest disasters and tragedies peculiar to man as distinguished from the lower animals can be

traced back to these illusions which arise from the misuse of concepts. Often the concept which ought properly to serve as an hypothesis, guiding us in the search for truth, is misused as though it constituted truth, and so we fall into error. Still more frequently the idealizing concept, which represents what I should like to do or be, is held so vividly and lovingly before the mind that it becomes an illusion. That means it is misused as descriptive of what actually exists when in fact nothing of the sort exists. The ideal the lover cherishes for his beloved, the parent for her child, often becomes an illusion in this way.

One of the greatest illusions arising from the misuse of concepts is found in philosophy. It is the belief that the implicative system of concepts in mathematics and elsewhere constitutes an independent transcendental realm of "pure being," which is a "higher reality" than this world of natural events with its characters called physical bodies and time and space and sensations.

This philosophic illusion must be examined briefly, for it has played a great part in the history of philosophy and in religious thinking. It still plays a great part. But the proper connection between religion and truth can never be discerned until this illusion, this misuse of the concepts, is corrected. The danger is peculiarly insidious because this view has been held up as a great defense of religion and "religious truth." We believe some of the great ills from which religion to-day is suffering have arisen from this philosophic illusion.

According to this illusion, as we have said, there is a transcendental realm of concepts, sometimes called the realm of subsistence as over against the realm of existence. It is a realm of abstract forms, of imperishable principles, eternal, uncreated, not dependent for its being on anything that men may do. When religion enters

this view, as it often does, this realm of pure concepts becomes the divine. No matter what may happen to this world of time and space and sense and matter, so runs the theory under consideration, these laws stand without any modification whatsoever. The consequences of a mathematical computation are fixed and changeless no matter what men may do and no matter what cataclysms may occur in this world of matter.

Those who hold this view of concepts may readily grant that our thinking of these eternal concepts is dependent upon the biological organism and its interaction with environment. But the concepts themselves, so they claim, are in nowise dependent upon such a mundane process. Whether we think them or not makes no difference to their being. This view has in it much of truth, but also, we believe, much of error.

According to this view the value of concepts is something additional to anything we have thus far mentioned. All the values we have attributed to concepts might be granted. But in addition to these values it is good for man to enter this realm of pure concepts regardless of any service the concepts may render in discriminating the features of sense experience or gaining accurate knowledge of things that happen in this world of sense, and regardless of their aesthetic value, their organizing value and their idealizing value. Some have claimed that the highest endowment of man is his ability to think his way through these concepts without the need of sensuous imagery and without the motive of turning the concepts to use in any of the ways we have mentioned.

This view of concepts has a very ancient and noble history. It cannot be lightly dismissed. We must examine it, but we cannot at this time give it the attention it deserves. Yet we must set forth the reasons why

we believe it is mistaken. We fear the necessary brevity of our statements will give them an unwarranted air of dogmatism, but the limitations we have imposed on this discussion make such brevity and apparent dogmatism inevitable.

Concepts are the meanings of symbols. All will probably agree to this, whatever additional claims they may make for concepts and for meanings and symbols. Symbols, being words and the like, are existent things happening in time and space. Furthermore, they are created, used and developed by physical organisms. When symbols and their meanings have once been brought forth, they open up a vast realm of possibility which may or may not be actualized in the form of meaningful symbols used by men. Indeed we can go farther than that. Inasmuch as symbols with their meanings have developed in this existent world they have always been a possibility which became an actuality when men came into existence and attained a certain level of culture and began to devise and use symbols which had meanings.

But this realm of possibility is not peculiar to symbols and their meanings. It is true of every existent thing. This desk before me is not only what is actualized at the present moment; the present actuality of the desk involves a certain future and a certain past. But this future with all its possibilities is not something independent of the desk. It is involved in the desk. The desk would not be what it is now if all these possibilities were not precisely what they are. These possibilities make the desk what it now is; and the desk as it now is determines these possibilities. The determination between actuality and possibility is mutual and reciprocal.

All this applies to symbols and their meanings. Just

as one may manipulate the desk, burn it, hack it, sell it or what not, in such a way as to actualize certain determinate possibilities, so one may combine and develop symbols with their meanings in such a way as to bring forth certain further determinate meanings. The total realm of concepts consists of all the meanings which are now borne by human symbols plus all those further meanings which may be borne by human symbolism in consequence of the further development, transformation and combination of symbols and meanings. These further possibilities are to be discovered, just as the further possibilities of the desk are to be discovered. But these further possibilities are not transcendental. They do not constitute another realm except as all possibility may be said to constitute a realm in distinction from the actual, or as the future is a realm in distinction from the present. Those unsymbolized concepts, which constitute the further possibility of developing meanings by means of symbols, are determined by the symbolized meanings which are now in use by men. For example the further decimals, never yet discovered by man, which result from dividing the circumference of a circle by its diameter, have being not in some transcendental realm, but as the determinate possibilities arising in consequence of the mathematical symbolism devised by men. In a certain sense these concepts, for which we do not yet have symbols, pertain to the symbols and meanings now in use by men, since they constitute the possibilities inherent in the further development of these latter. And all these, both the meanings now symbolized and those yet to be symbolized, have arisen out of the interaction between organism and environment. They are the possibilities which inhere in this biological process. But they have no independent being apart from this process and apart

from the events of nature with the time and space and sense involved.

The human organism, preëminently the human cortex, together with all the other conditions which determine the possible transformations and developments of human symbolism, determine, and are determined by, all possible meanings as well as all actual meanings. This totality of actual and possible meanings constitutes the whole realm of concepts. But this realm of concepts is plainly not a transcendental realm in the sense of being something separate and independent from the world of time and space and sense. Meanings are not temporal nor spatial nor sensuous if by that one intends to assert that they are limited to some particular time or place or data of sense; but they are involved in this existential world of events with their time and space, and they could have no being without events out of which they arise, to which they refer, by which they are borne and which they characterize. More especially, these meanings as symbolized, or as possibilities of symbolism, arise out of the biological process of interaction between human organism and environment. More especially still they are the creatures of human symbol-making which develops out of this biological process. The total existent world both determines and is determined by its own possibilities; and amid these possibilities are all those meanings which may be developed out of it by human symbol-making and all logical processes.

There is, then, no realm of concepts independent of interaction between organism and environment. Concepts have two kinds of being, just as everything else has. First, they are the meanings of symbols now in actual use by physical organisms; second, they are those further meanings which may be brought into use by the more extensive development of symbols and logical

transformations. But a realm of pure concepts independent of sense experience is a myth. Concepts have their high and noble part to play within the total process of interaction called human life, with its sensitive and responsive organism and its wealth of immediate awareness and its symbols. But to cherish the ideal of a life which lives and moves and has its being within a realm of pure concepts alone, without intermixture of these other factors, is totally to misconceive the process of human living. Such a dream is as futile and foolish as to go to the opposite extreme and seek a human life filled with sensuous experience alone without help of concepts. Concepts are indispensable to human living, although one may live at the level of lower animals, certainly at the vegetative level, without them. But to try to use concepts apart from that interaction between organism and environment which makes up human living is like trying to use the heart without the lungs. The use of concepts is not the whole of life any more than is breathing, although concepts and breathing are both indispensable to human living.

With this understanding of the nature and use of concepts in general, let us consider what may be their place and use in special realms of human interest, especially in religion. Perhaps we can get the religious use of concepts in better perspective if we first inquire concerning their use in certain other fields such as mathematics, politics and friendship.

First of all mathematical concepts may be used to attain truth. By experimental observations, such as direct measuring or other methods, I may ascertain that yonder tree is ten feet high. The concept of number ten taken by itself alone is not truth; it is simply a concept. But the proposition that yonder tree is ten feet high is truth if it is verified. Some mathematical propositions,

then, are truths. Others are hypotheses which are not true but are used to attain truth. The proposition that yonder tree is eleven feet high was an hypothesis until it was corrected by further investigation. Even though it was not true it was very useful as a means of guiding my investigation in such a way as to enable me to attain the truth.

Still other mathematical concepts are not truths; neither are they hypotheses which serve to attain truth. They are simply those meanings and those possible meanings which mathematical symbols can be made to bear. The proposition that two times two is four is not truth as we have defined that term. It is not necessarily a correct and accurate description of any existent thing or combination of things. To be sure, it may be used to attain truth. One may use it to ascertain how many apples in the sack, and so when applied to these apples it becomes a truth. But it need not be so used, and in pure mathematics is not so used. In pure mathematics the chief significance of the proposition that two times two equals four is that it can be developed to infinity along a line of determinate possibility, as cannot be done with the proposition that two times two equals five. From the proposition that two times two equals four one can, if he invents, or has at his command, the right kind of symbols, develop an infinity of meanings which already inhere in the proposition as its possibilities. This same infinity of determinate possibility of meanings inheres in the proposition that two plus five equals seven. But it does not inhere in the proposition that two plus five equals eight. Perhaps an infinity of meanings can be developed out of any proposition providing one has the right symbols at his command, but not this same peculiar determinate system of possible meanings which the mathematician explores.

Thus far we have found three uses of mathematical concepts: the concepts which constitute truth about some existential object; the propositions which serve as means to attainment of truth called hypotheses; and finally propositions which serve merely to represent certain implied systems of possible meanings without necessary reference to any existential thing. This last we have called the organizing use of concepts, since by this use concepts are organized into a single implicative system.

Still again mathematical concepts may be used to quicken the imagination and arouse the emotions and engender a pleasant state of consciousness. Contemplation of the infinity of whole numbers may do this, as may the marvelous accuracy, simplicity and symmetry by which a problem is solved. The perfect order and system of mathematical concepts may give keen aesthetic delight.

Again mathematical concepts may be used to portray what I wish might be true, but what I know is not. If I am overweight, mathematical concepts enable me to conceive what weight I should like to be. If I am poor, mathematical concepts enable me to compute the amount of money I should like to have.

Now these five uses of concepts can be found in all the major interests of mankind, in politics, in friendship, in religion. I have those concepts which constitute the truth I know about my friend. I have other concepts which may not be true but are very useful hypotheses to guide me in search of the truth about him. Still other concepts enter into my friendship merely to represent whole systems of meanings which may inhere in our friendship or be developed out of it. Again I have concepts about my friend which are mere poetic fancies. I know they are not true and I do not desire them to be

true, but it pleases me to entertain them. I like to think of my friend as a Spanish cavalier, not because I want him to be such a person, or think he is or ever will be, but merely because it delights me to clothe him in such a nimbus of fancy. Finally I have concepts which portray the ideal of what I should like my friend to be but which in truth he is not.

These five uses of the concept enter into religion; but the emphasis they receive is very different from what it is in friendship and exceedingly different from what it is in mathematics. Indeed, while all five of these uses enter into all the chief branches of human culture, they receive very different emphasis in each. In mathematics the use of the concept as a representative of implicative systems without regard to any description of existent things is the use which far outweighs all others. Next in importance for mathematics, perhaps, comes the aesthetic value of the concept. In mathematics these two greatly overshadow the others. Of course the emphasis that may be given to the several uses of the concept depends upon the individual and the circumstances. But in general we believe our statement holds true that in mathematics the two uses, the aesthetic and the representation of a determinate system of possible meanings, are the all-important uses.

But when we turn to friendship and love we find that the truth use of the concept, its descriptive function, becomes far more important than in mathematics. In mathematics I may compute the twentieth decimal of π without any interest or belief in the existence of any circular object appearing in nature with just that ratio holding between its diameter and circumference. But if I love my friend, I earnestly desire to know what he existentially is and what is actually happening to him. Abstract concepts about him, no matter how

logically spun out, are not sufficient. If he is sick, I want to know about it. If he has triumphed, my concepts about him are relatively worthless if they do not inform me of the character of that joyous event. If anyone is in doubt about the passionate craving for truth in friendship and love, let him go to David awaiting news about his son Absalom. Not merely the ideal, and not merely the pleasant fancy, but the truth, he must have.

When we come to religion this demand for the truth becomes even more passionate and imperative. Ideals are cherished in religion, and pleasant fancies and implicative systems, just as they are in every other branch of human interest. But more than ideal and more than pleasant fancy and more than implicative system, the religious person wants to know the correct conceptual statement of what may be that character of the world event which can be called God.

Let us not be misunderstood as asserting that religious beliefs are more likely to be true than others. On the contrary, such is not the case at all. But what we are saying is that in genuine religion it is the truth that is craved above all else. In religion truth is sought so passionately and desired so intensely that men often assume they have the truth when they have it not. Such is also the case in friendship and love. David may not be able to cast aside as false the belief he has cherished as true. And the religious person may not be able to relinquish his beliefs. Hence the dogmatism and fanaticism. But this fanaticism in love and religion is due to the enormous value that is placed on what the truth may be. In the abstract sciences one can be tolerant, for the truth is a matter of small concern. But whether Absalom be dead or not is not a matter of small concern. And whether or not the world event bear that

character on which I have built all my hopes and to which I have entrusted all that I hold dear is not a matter of small concern.

Contrast this passionate craving for truth in religion with the opposite attitude in mathematics. Mathematicians delight in developing their concepts of non-Euclidean geometry and poly-dimensional space without any regard whatsoever for any existent thing which such concepts can describe. Rather they joyously assert that many of these mathematical systems do not refer to any existent thing or condition. They delight in their freedom from all the "narrow limitations" of existence, and soar away into the development of all possible meanings which their mathematical symbols can be made to yield without regard to any description of natural events.

Turn to the great historic religions and observe what a contrast they present to mathematics in this respect. Religion and mathematics stand at the two opposite poles in this matter of valuing the truth-concept, *i.e.* the concept as embodied in a verified belief about the character of events. Nowhere in all the fields of human interest is the truth value of the concept so highly prized as in religion. Religion is man's acute sense of profound dependence upon some actual condition (God) which now exists. It is also his strenuous, often his desperate, attempt to adjust himself to this condition in such a way as to escape disaster and to achieve highest good. Furthermore this dependence and adjustment involve all his dearest hopes and loves and all the greatest goods of life, both actual and possible. Consequently religion, by its essential nature, must drive man to a passionate quest for knowledge concerning that existential condition upon which his all depends. It is, therefore, very plain that the religious man must crave truth

with all the passions of his nature and must prize the truth value of the concept above all its other uses.

Immediately some will think of the natural sciences as rivals, if not superiors, to religion in this matter of prizing truth. But a little examination, we believe, will show that truth, and the truth value of the concept, is not prized nearly so much in science as in religion.

The first thing to note is that the scientist is more interested in the pursuit of truth than in truth itself. But it is very truth that the religious man desires with the deepest cravings of his nature. Science is a method by which the game of seeking truth can be played with the utmost skill and greatest interest for the players. Science is like a game, furthermore, in the fact that it carefully excludes all those interests and objects which would interfere with the technique of the activity, no matter how vital and urgently important those objects and interests may be. This is not a flaw or cause for blame to be cast on science. On the contrary, science could never render the great services it has rendered had it not thus limited the field of its operations. But it shows that science is not concerned with truth concerning the supremely important objects of human concern except as these objects may happen to fall within the bounds of its special technique and field. And within these bounds the energies of science are given over to the formulation and testing of hypotheses rather than to the cherishing of verified beliefs. In fact, as soon as a belief is established, or insofar as it may be established, pure science ceases to have any interest in it except as it can be used in the further pursuit of truth, or as its truth may be questioned and some error or supposed error attributed to it. The pure scientist as such would have nothing to do, and the descriptive sciences would pass out of existence, if every feature of

this existent world were accurately described by some fully verified belief. But if religion had a set of beliefs fully verified and accurately descriptive of the objects which concern the religious man, religion would reach its maximum activity and power. And if David's love for Jonathan and Absalom had such beliefs, how magnificent would love become! Pure science would shrivel up with verified beliefs, but love and religion would flourish as never before.

These facts lead us to conclude that it is religion which cherishes and craves truth far more than science. If science should attain the final truth about God and how best to adjust to him (supposing such a thing could ever be), religion would take over these findings and use them continuously and gloriously. But science would drop the matter entirely once the truth had been found.

CHAPTER XV

Religion and Philosophy

We have compared science and religion to show that religion values truth far more than science and exalts the truth value of the concept far above any other value the concept may have, to a degree not found in science. Let us now compare religion and philosophy in this respect.

It has been claimed that the very etymology of the word philosophy shows that it represents the greatest love for truth. To be a philosopher, or enter into the spirit of philosophy, so it has been said, is to love wisdom; and to love wisdom includes, whatever else it may mean, the love of truth. Such is the claim often made.

But such a statement about philosophy is full of ambiguity. The ambiguity springs from the word truth. Truth may be used in two very different and mutually exclusive senses. The Greeks, who coined the word philosophy, did not clearly distinguish between these two very different meanings. Sometimes, or in part, they meant by truth consistency and clarity of concepts, regardless of whether such concepts clearly described any character pertaining to the events of nature. At other times, or in other part, they meant a correct description of the characteristics of natural events.

Now if by truth one means clarity and consistency of concepts, philosophy is the love of truth. But if by truth one means an accurate description of some feature of the existent world, such as the way water forms

into ice, or the situation that stirs men to rage, or the correct way to prevent war, or the structure of snowflakes, then philosophy does not directly seek truth at all. It is true that many embryo sciences, notably of late psychology, and many practical human interests have been conducted under the guise of philosophy. But these do not constitute philosophy proper. Philosophy proper, philosophy pure and simple, purged of all foreign elements, is the work of clarifying and systematizing the concepts which are used in the exact sciences and in the conduct of everyday life beyond the scope of the exact sciences. Philosophy works over all our concepts to free them from ambiguity and vagueness and to bring them into relations of mutual implication. It does this (1) for those concepts which constitute accurate descriptions in the exact sciences; (2) those concepts used as hypotheses to attain accurate descriptions; (3) concepts used in this twofold way in the practical undertakings of everyday life, as in friendship, love, political activity and religion; (4) concepts used to portray what we should like to be or do or have, our idealizing concepts; (5) concepts used to quicken the fancy and enrich the consciousness in the lyric constructions of fine art; (6) concepts used to organize into an implicative system all the members of any distinct realm of concepts.

The last mentioned use of the concept, its organizing or abstractly logical use, is also its philosophical use. This may cause some confusion unless we clear up a certain point. Not only does philosophy develop the abstract logical use of concepts with a view to systematizing all the concepts used throughout human living, but each different department of life, such as each of the exact sciences, has its own organizing work to do and hence its own special use and application of logic. But while each department tries to organize its own concepts in a

logical manner, philosophy lends its aid and coöperation both in helping the department to organize its own concepts within its own field and also in organizing the several departments in relation to one another. There is close affinity between pure mathematics and philosophy in this respect. Pure mathematics is given over wholly to the logical organization of concepts without regard to accurate description of nature. And mathematics is a great aid in organizing the concepts in many different departments of life. But philosophy reaches farther than mathematics, dealing with conceptual relations that lie outside the scope of mathematics.

This organization, clarification and development of concepts for the use of the exact sciences and for the uses of everyday life is one of the most important functions of human living. The value of this service which philosophy renders may not be so readily discerned as the value of the services of plumber, engineer and dentist. But the value of these latter depends ultimately upon the success with which we conduct the whole enterprise of human living; and our success in this total enterprise depends in great part upon the clarity, consistency and adequacy of the concepts by means of which we discriminate, appreciate, control and adjust ourselves to the more significant features of the experience that befalls us. But this discrimination, appreciation, control and adjustment cannot rise above the most crude and limited form without concepts; and the scope and efficiency of this way of dealing with experience depends upon the adequacy of our concepts. Even the dreams we cherish can be magnificent and most beautifying to life only as we have concepts fit for such dreaming. We need philosophy, then, to keep our concepts fit, as the ditch digger needs a blacksmith to keep his pick and shovel sharpened.

This refashioning of the concepts used in the exact sciences and daily life will, of course, have a profound effect upon the course of life as a whole. Not only does philosophy make life more efficient through this service. Perhaps efficiency is the least of the services philosophy can render. In the narrow sense of efficiency philosophy does not help at all. The fact that the ditch digger has a sharp pick does not necessarily make him efficient. But the greater service philosophy affords is to keep life rounded out, prevent it from too narrow concentration upon one line of endeavor and overemphasis of certain goods to the exclusion of others. Also by giving its own selection and emphasis to the concepts that are in use philosophy may reshape and redirect the whole movement of life. We do not mean that philosophy is ever the sole, nor even of necessity the sovereign, factor in shaping human life. We are saying only that it is one of the shapers. Merely to survey the concepts that are employed in human living, and thus to become clearly conscious of them, may have a profound effect and make life very different from what it would have been if this survey had not been made. When we bring to clear and self-conscious statement the concept of what we are seeking, our seeking may be greatly modified. Let any individual try it with respect to his deeper and more insistent inclinations. Philosophy does this for the civilization of its day, insofar as it is able.[1]

Another great service of philosophy arising out of its critical survey and examination of our concepts is the reconciliation of traditional policies and principles with those newly arising. We cannot conduct life efficiently with concepts that are inconsistent. If our concepts are mutually contradictory, life is thrown into confusion, and

[1] *Cf.* Dewey, John, "The Rôle of Philosophy in Civilization," *Philosophical Review,* Jan., 1927.

we destroy our own constructions. This does not necessarily hold true of concepts in the realm of abstract reason apart from their use in guiding our adjustments to the characteristics of events. Inconsistency of concepts in the abstract may have very little effect upon life as a whole. But inconsistency in those concepts which are truth seeking and which state the beliefs by which we live may have most disastrous consequences to life as a whole. One of the most common forms of this inconsistency appears between traditional beliefs and those which arise out of experimental operations upon novel situations. Philosophy endeavors to bring about some system and harmony among these two sets of beliefs, the old and the new, and thus avoid the disasters and deprivations that would ensue if the inconsistency were not removed.

But in all this great work of philosophy it should be noted that the actual work of achieving truth through observing the experimental application of concepts in making human adjustments to the world of events is something which philosophy does not do at all. These experimental adjustments and observations by which men gradually attain some correctness in their conception of the features of events is the work of the exact sciences and of practical everyday life. Those characteristics of events to which we must adjust if we would live in that ample and magnificent manner which human nature demands are so complex and far-reaching that they far exceed the bounds of research covered by all the exact sciences. We have no science that can inform the political leader precisely how best to adjust himself and the members of his group to one another and to the world situation. Nevertheless the observations and experiments of successive generations of political leaders do gradually develop a policy which may become more

clear and more adequate to guide the leaders of the people and the people themselves insofar as they act as a political group. The word policy, however, scarcely indicates all that we mean. Where there are stable institutions to transmit the fruits of experience from one generation to another, there is, or may be, an increasing wisdom in the conduct of political affairs. This wisdom cannot be clearly and completely stated in the form of definite propositions. Therefore it is not the work of an exact science. It is chiefly the work of the gradual ripening and perfecting of certain habits and mental attitudes. The historic development of English government and political life is an excellent example of this. There is, then, a rough-and-ready method beyond the exact sciences by which a crude but invaluable form of truth is attained, a method which gives us, more or less correctly, more or less vaguely, a description of the features of human events which enables us to make required adjustments to them to the end of living more fully.

A similar process can be traced in the development of judicial procedure and the adjudication of cases. There is a "spirit of the common law," as Roscoe Pound has so well shown, which guides the judge in making his decisions. The experiments and observations of many generations of judges have yielded an inadequately formulated, often vague and ambiguous, but exceedingly valuable, description of certain characters of events which critically affect the welfare of man. This description enables the judge to deal with complex problems in a far more satisfactory manner than he otherwise could.

A similar process may be seen in the development of friendly intercourse. What makes a gentleman? Is there any science which precisely describes those characters of the events of human life to which one must adjust himself in order to be a gentleman, and how to make that

adjustment? There is not. And yet there is a wisdom which makes the gentleman. It cannot be acquired in a day, nor even in a single generation. At its best it is the ripe fruit of many centuries of experimentation and observation. Only an individual born in that group which has inherited such a culture, or an individual who has access to such a culture during his plastic years, can be the most refined gentleman. It is said that the cultured Chinaman is the finest gentleman in the world. The Chinese have been accumulating the results of experimentation and observation in this field of gentlemanly adjustment for a greater number of years than any other people. They have acquired a wisdom which cannot be reduced to the strict accuracy of scientific concepts, but which can be conceptualized to some measure and hence is a rough form of approximate truth.

Love, also, is the fruit of culture. It also depends upon habits and mental attitudes which can be acquired only in consequence of observant experimentation in mutual adjustment between personalities. First there must be transmitted to the child certain habits and mental attitudes which are favorable to the development of love. These are not received by him in the form of concepts and may not be conceptualized by those from whom he acquires them. But they have been developed throughout past generations by observation and experiment and perpetuated in the form of tradition. Equipped with these habitual mental attitudes the individual may undertake the great art of love and, if he is observant and experimental in his methods, make a great success of it. But he must have the background of such cultural training and must seek out the right way by the methods of practical everyday learning, since there is no exact science that can instruct him in making those delicate adjustments which the life of love requires. Mere sex

behavior, of course, does not require any such training nor any such experimental observation.

What has been said of political activity, judicial procedure, gentlemanly conduct and love applies also to religion. Religion is an attempt to adjust to events. It also depends upon discovering that character of events to which adjustment must be made. The only way to discover such a character or structure is by experiment and observation. But the characters are so complex, the events that bear them so vast, that no single generation without the background of a great culture can expect to proceed very far in ascertaining what the important features are, nor how to adjust to them. The same, we have seen, is true of political activity, judicial process, gentlemanly conduct and love. But religion has undertaken a task more difficult than the others, even as the goods for which it strives are greater. As political activity seeks adaptation to a character of events more complex than those described by the science of physics, and strives for greater goods than those which physical science alone can provide; as love seeks adaptation to characters more complex than those which come within the scope of political interest and strives for greater goods; so religion seeks adaptation to a character still more complex and far-reaching in scope, and for the sake of still greater or more inclusive goods.

The business of philosophy with respect to all these different departments of life is to try to formulate more clearly the concepts that are operative in all these different undertakings and bring these concepts into more systematic relations with one another, so that the various strivings of human life may be more harmonious and coöperative with one another and the whole enterprise of human living may be carried on more successfully to larger fulfilment.

If this statement of the nature and function of philosophy be accepted it becomes plain that philosophy does not seek descriptive truth directly by experiment and observation, as do the exact sciences, and as do political activities, judicial processes, friendly intercourse, love, religion, and many other phases of practical human living. Philosophy may quite well, and often does, contribute greatly to the attainment and conservation of truth inasmuch as it may render our concepts better fit for the work of describing accurately the existent world and for seeking more accurate descriptions of it; but the actual work of achieving such true descriptions by way of observing and experimenting with the data of immediate experience is something which philosophy does not do at all. The natural sciences do this within a limited field, according to a fine technique; practical everyday living does it throughout a wider field and according to a much less refined and reliable technique; religion does it with respect to those conditions upon which man is dependent for the dearest and greatest and most far-reaching goods. But philosophy does not do it at all. Therefore philosophy does not and cannot seek truth (correct description) directly and cannot by its own own efforts give us true beliefs. It can only coöperate with those activities by which truth and other goods are achieved insofar as it suggests improvements in the concepts which these activities may employ.

Philosophy has often made the claim that it could give us truth directly, that it offered a short cut to truth not dependent on experimental observations of the data of immediate experience. The method which it has offered has been that of speculation. It has assumed that by clarifying, organizing and developing through logical processes a vast implicative system of concepts it was giving us the truth. It has based this claim on the view

that in doing this it was ushering us into that realm of transcendental and absolute reality which is made up of eternal concepts independent of this world of sense and time and space. But we have already criticized that view.

If the view just stated were correct, and if philosophy could bring us to the transcendental realm of absolute reality which was also the supreme good, then philosophy would be religion and the only worthy kind of religion. But if we measure the supreme good by human need, this realm of pure concepts is not the supreme good. It is not even a good that approximates the supreme good, however valuable concepts may be. Therefore speculative philosophy becomes foolish and futile when it sets itself up as the way to satisfy the supreme needs of human living. Such a monstrous idea could arise only among groups of men having a peculiar bent and interest and, moreover, peculiarly sheltered and sustained by the efforts of others, so that its members never became aware of the conditions and methods by which the goods of human life must be obtained, sustained and magnified. And by goods we do not by any means refer solely, nor even chiefly, to economic goods. This realm of pure concepts cannot, for example, provide the good of great love between personalities, except indirectly as concepts play a part in every cultural human interest. Love depends upon many other factors besides abstract concepts. And the same is true of all the other most holy and most spiritual goods of human life.

So we claim that religion, as compared with science or philosophy, or any other field of human interest, prizes truth most highly and most passionately. Furthermore, when this passionate craving for truth does not lead to the illusion that truth has already been attained, religion seeks for truth most earnestly, most directly and with

readiness to sacrifice most for its attainment. Neither science nor philosophy can equal it in this respect.

The misconception of the religious attitude toward truth, which at times has widely prevailed, is almost tragic. No greater affront could be given to religion, nor a more harmful and distorting statement be made about it, than to claim that the function of religion was not to seek the truth, not to cherish the truth, but merely to provide the human heart with sweet fancies and pleasant states of consciousness. Nowhere outside religion does human passion rise so violently against every supposed deviation from the truth, no matter how pleasant this deviation may seem to human fancy. Surely, if the history of religion teaches anything at all concerning its character, it teaches that religion involves passionate devotion to what is believed to be the truth. Of course the truth which is so passionately cherished is what the devotees believe to be the truth, and the error so violently denounced is what was believed to be error. But it was truth that was sought and truth that was cherished, as truth was apprehended. And it was error that was fought and error that was fled, as error was conceived. No doubt the very zeal with which accepted belief was clung to prevented religious souls from weighing correctly the evidence for and against their beliefs. This was a very grave error and worthy of all condemnation. But it in no way invalidates our contention that in religion we find truth sought more earnestly, and prized more highly, than anywhere else in the whole range of human living.

Yet there is no field where truth is so difficult to attain as in religion. The reason for this is plain. It is because the existing object, the sustaining and determining condition, of which religion seeks a correct description, is so complex, so vast, and requires such great fulness of con-

crete experience for its apprehension and progressive portrayal.

But there is a method by which the verified belief, constituting the truth religion seeks, can be achieved, although it must be done very slowly, very painfully, very laboriously, throughout many successive generations of toilsome sacrifice and with much admixture of error. This method has been exemplified by any one of the great religious teachers and leaders. It is somewhat as follows: He retires to the wilderness for forty days and nights, or to the desert of Arabia for several years, or under a banyan tree, and meditates on all the concrete experiences of life, both his own personal experiences and the experiences of others, contemporary and historical, until he formulates or intuitively apprehends a theory concerning that character of the world event which most critically affects the good of human life, and how best to adjust to it. Generally this theory comes to the prophet in a moment of profound insight. Then he tests his theory by actually living it out.

The procedure may not be so deliberate and self-conscious as our description would seem to imply. But it always involves these two things: the apprehension through worshipful meditation of some conceivable way of life, and the testing of this way of life by experimental living, accompanied by careful observation. The care and rigor of such observation are most strikingly illustrated in the introspective analyses made by the great mystics recorded in the writings they have left. In the greatest religious leaders, however, such as Jesus, Buddha, Confucius, Lao Tse, we find not merely introspection, but the most acute observations of the consequences which result from the application of their way of life to men and social processes.

The experimental way of life by which vital truth is

sought concerning God need not be first formulated in some prolonged initial period of worship and meditation. It may be gradually developed and constantly corrected and revised in many different periods of meditation alternating with periods of practical experimental application in the living of it. In fact, this alternation is what constitutes religious living. In worship one's way of life is critically surveyed, one's plans revised and developed. The results of one's experimental living and observation of others are examined and interpreted, and applied to the further illumination of that character of the world event which is God, and of the way of life which is best adjusted to him. Then this revised way and added light is put to the test in a further season of experimental living.

Some of the great religious individuals of history, by following this method, have audaciously spun the web of their lives out into the void, desperately dangling on the threads of love, to ascertain if the ultimately sustaining character of the world would support such a way of living. These great experimenters, and all others who have any share in their enterprise, slowly learn from one another as the generations pass into centuries. Thus does the human race gradually acquire some knowledge, mixed with much error, concerning God and the life that is lived in him. Thus is religious truth attained. The results of these many centuries of worship and experimental living have been gathered up into the Bible. The outlandish claims that have been made for this book should not blind us to the treasures it contains.

But there are two false claims that frequently frustrate this worshipful, experimental way of living by which the painful and laborious acquisition of religious truth proceeds. One is the claim that religion does not essentially have anything to do with descriptive truth.

It is the claim that religious people should be fed on ideals and myths; that the true nature and function of religion is to prize and cultivate not the concepts by which men strive to apprehend and state the truth about the character of events, but the concepts which portray the lyric constructions of art and lovely fancy. Religon is concerned only with ideals, not with facts, they say. In other words, because truth is so meager and difficult of attainment, and so mixed with error in religion, many have sought to escape the toil and sacrifice of the great quest and the great demand by claiming that religion has no need of truth. This is a very easy way out. It is what is called a "defense mechanism." Religious truth becomes identified with the traditional sour grapes.

To take such a position as this toward religion is to betray the great historic striving of the race. It is to cut the vital nerve of religion. To extend such "help" to religion is to give it the kiss of death.

We said there were two false claims that turn religion aside from its rightful course. The second is just the opposite of the one we have been describing. It is the claim that religion already has the truth; or, if not the total and complete truth, at least as much as is needed. This error is not so insidious and fatal as the first, but it is disastrous enough. It is, of course, a very ancient and common claim among religious people who have received their religion by social inheritance. It also is a way of escape from the slow and difficult process by which religious truth must be sought.

When we assert that they are mistaken who turn away from the toilsome experimental quest for religious truth with the claim that religion already has the truth, we do not mean to deny that religion has some measure of truth. The long succession of great historic religious

lives has tested certain ideas sufficiently to justify the claim that we have some notion of that character of the world event which most promotes human good and some notion of how to adjust to it. This notion has not yet developed to the point where it can be stated with the exactitude of a scientific concept. But just as the long history of the political life of mankind has developed certain beliefs, however vague and ambiguous, by which our political life is guided with a greater measure of efficiency than that of primitive savages, who cannot organize groups greater than fifty, because they lack such concepts and beliefs, so also the long history of man's religious life has brought forth certain concepts and beliefs which have some measure of descriptive truth, however mixed with error. For truth, in the sense of conceptual description, can have all degrees of completeness and accuracy, or incompleteness and inaccuracy.

Here are the two opposite claims that have perverted religion again and again, one denying that religion has any need of truth, the other asserting that religion has all the truth it needs. These two mistaken claims have led many to think they could be religious without undertaking the heroic search by way of profound worship and experimental living, by which religion seeks and slowly finds the truth which is more precious to humankind than any other in all the realm of truth.

Besides the two errors just described there are two others which bear more directly upon the relation of philosophy to religion.

The first of these two errors concerning religion is a very natural one for the philosopher, the mathematician and the abstract thinker generally. It consists in disapproving those strivings of human life which reach out beyond the scope of the clear and consistent concepts

which the abstract thinker has brought to perfection. It is the error of failing to see the value of obscure and inconsistent concepts used in the search after goods to which our definite and consistent concepts cannot be made to apply. These thinkers say: "If my clear and consistent concepts, which I have worked so hard to bring to this state of perfection, cannot be applied to those goods and those problems of human living, then so much the worse for human living."

In extreme cases philosophic thinkers have condemned the whole realm of sense experience and organic interaction with environment as a lesser good, or even a positive evil, from which we must escape in order to live solely in that realm of pure abstraction where we can be sure that our concepts shall always be perfectly clear and consistent. And this view has been presented by philosophy as a service to religion!

This condemnation of the whole realm of sense is not so common in modern times as it has been in the past, because the natural sciences have arisen as mediators between clarity of concept and experience of sense. They have succeeded in devising such concepts on the one hand, and so limiting and controlling sense experience on the other, as to bring together these two factors of human living, the clear concept and sensuous experience. This alliance of the two has been of great profit to mankind. But scientists have done this by limiting themselves to certain special concepts only, and, more significant still, by carefully excluding from their consideration the greater part of that rich intercourse between organism and environment which holds in store the greater goods of human living such as we bring under the heads of love, beauty and religious experience.

This error of the abstract thinker is analogous to that of the housekeeper who thinks the best house is the one

which can be kept most free of all dirt; or that of the drillmaster who thinks the best army is the one that conforms most perfectly to all the prescribed rules; or that of the valet who thinks the best people are the ones who wear the most immaculate clothing. It is an old, old error into which specialists constantly fall. The best library is not necessarily the one in which all books are kept most faultlessly in order, although some librarians seem to think so. Since it is the business of philosophers to keep concepts in excellent order, they are likely to think that the concepts having the best order are the best concepts. To be sure, it is well to have order in library, or house, or army. But order is not the sole and only good in life. And libraries, houses and armies that are doing the most good in the thickest struggle of life are not necessarily the most orderly.

Now all this applies to concepts. In everyday life there are goods for which we must strive with might and main. Let us have the most orderly concepts we can get, but in heaven's name let us not turn away from the greatest and most difficult goods merely because we do not have a perfect system of concepts to use in their quest. We need the best concepts we can get in seeking fullest community and coöperation between individuals and groups, and in seeking the goods of art, aesthetic culture, moral endeavor and religious striving. But in these regions where life is fullest, where interaction between organism and total environment is most complex, our concepts are least adequate.

This manifest inadequacy of our concepts in the more difficult undertakings of life is the source of the second misunderstanding concerning the bearing of philosophy upon religion. The first error, we said, was that into which the abstract thinker is most likely to fall. The second is common among practical men and mystics. It

is the notion that concepts are not needed in the quest of goods to be found in the fields of religion, love, beauty, friendship, political life, etc. But just the contrary is the truth. There is no place where concepts could help human living so much as in the search after the goods of love, of social adjustment, of beauty and of religion. It is true that in these regions our concepts are pitifully inadequate. But that simply means we have not yet developed the concepts we so sorely need for the mastery of these greater goods.

Because of the evident inadequacy of our concepts, the practical man and the mystic often claim that there is a kind of "intuition," or "faith," or holy book, or miraculous guidance of the Holy Ghost, which in these regions can meet our need without the help of concepts. As a matter of fact, an intuition is a concept and so is faith, and so are beliefs that may come from the holy book or some other source. But they are concepts which have entered the mind without deliberate examination and without careful testing. Generally they are obscure, ambiguous and inconsistent. They may be the best we have. To give up these obscure and inconsistent concepts for a neat and perfect system which does not apply to the problem before us would be the height of folly. No doubt the mystic and the lover, the political leader and the artist, the gentleman and the worshiper, must often fall back on "intuition," on impulse and faith and tradition and habit. There is nothing wrong in this when it is all that one can do. But to glory in it, and to claim that intuition, faith and tradition without reason constitute the very best means one could desire for approaching these goods, and to claim that concepts by their very nature are unfitted for such undertakings, is a great mistake. As already indicated, such persons do use concepts, however vague, confused and unex-

amined they may be. One cannot escape the use of concepts unless he is content to live by means of the impulses and habits of his animal nature and nothing more.

Let us not scorn the neat and perfect system of concepts insofar as it can be used. And let us not discount the immeasurable value of that ideal system of concepts, not yet developed by humankind, but which some day may be, which would serve to guide us swiftly and surely into the presence of God, into the presence of beauty at its maximum and into the presence of love at its fullest. Let us not call grapes sour simply because we have not yet learned how to reach them.

To bring forth such a most excellent system of concepts by the constant examination and correction of concepts in actual use in the exact sciences and in the various branches of practical life, is the great and uncompleted work of philosophy. Perhaps during the two thousand and five hundred years of its history philosophy has scarcely been aware of its own proper task and so has not accomplished as much as it might. But we cherish the hope that philosophy, now freed of entangling alliances as never before, reduced to fighting weight, and possessing a clearer perception of its proper vocation, is gathering its powers for the greatest service it has ever rendered. Indeed, it must do this if it is even to hold its own in the swift onrush of life which is occurring at the present time.

But we cannot stop with concepts clarified and systematized by philosophy, as though philosophy were the culmination of life and a substitute for the experimental processes of religious living, as Hegel and others have declared. If we stopped with these clarified concepts, which are the work of philosophy, we would be like men who thought they had digged a ditch because they had sharpened their spades; or had eaten a meal because they

had gotten a clean knife and fork and plate. We must apply our concepts, clarified and systematized, to the interaction between organism and environment in order to control life in such a way as to achieve that wider use and fuller appreciation of the concrete wealth of experience which bears such names as social intercourse, love, beauty and mystic communion with God.

Philosophy helps to clear away that confusion of mind and that error in thinking which entangle and distract, and render either futile or harmful the mighty thrust of religious enterprise. It opens the way for the practical efforts of everyday life by which the greater goods may be progressively brought to light. It saves men from that befuddlement and wasted effort which make them struggle like fighters in the dark, striking out in the air and accomplishing little except by accident, and sometimes producing disastrous consequences. Obscure and difficult concepts must be employed in the adventurous drive of religious endeavor. But the enterprise of religion will be frustrated and its power shorn if men fall into confusion of thinking concerning the methods and ends of religious living. To lose the power of religion from human life, or have it perverted to destructive ends, because of the inadequacy or confusion of its concepts, is one of the most pitiful and tragic evils that can befall human life. It is the part of philosophy to guard against such disasters. But philosophy can never take the place of religion.

INDEX

Æsthetic experience, 187.
Ayres, C. E., 20 *n.*

Belief:
  infallibility of, 17.
  intuitive, 245.
  true, 16, 17.
  verification of, 16, 17.
Bible infallibility, 17.

Cause, ultimate, 160 ff.
Church, 128, 129.
Complacency in religion, 146.
Concepts:
  distinguished from beliefs, 7 ff.
  general uses of, 216.
  philosophical treatment of, 235.
  religious use of, 31, 40, 229 ff.
  value of, in practical arts, 30, 31.
Concretion, principle of, 182 ff.
Confucius, 245.
Consciousness, 214 ff.
Conservatism and progressivism, 47 ff.

Determinism, 149.
Dewey, John, 237 *n.*

Experience:
  æsthetic, 187, 199.
  contrasted with truth, 21, 22.
  moral, 204.
  mystic, 153 ff.
  religio-æsthetic, 203.
  sensuous, 249.
  non-conceptual, 214.
Experimental method:
  as common sense, 239 ff.
  dependent on mysticism, 158.
  in religion, 63 ff.
  of Christ, 66, 67.

Fundamentalism, 56.

God:
  adjustment to, 83.
  beliefs about, 14.
  certainly known, 125.
  concept of, 14 ff., 179 ff.
  definition of, 59 ff.
  perception of, 92 ff.
  three uses of idea, 54.
Good and evil, 163, 187, 188, 200

Habits, 90 ff.
  and auto-suggestion, 73 ff.
  classification of, 84.
  good and bad, 86.
  in adjustment to God, 83 ff.
  in perception of God, 83 ff.
Habit formation:
  methods of, 99 ff.
  and worship, 106 ff.
Hegel, 252.
Hocking, Wm. E., 64.

Illusion:
  religious, 150 ff.
  philosophical, 221.
Indeterminism, 149.
Infallibility unattainable, 17, 46.
Interest and value, 160 ff.
Intuition and truth, 251.

James, Wm., 100.
Janet, Pierre, 114, 116, 119.
Jesus, 66, 127, 245.

Herrick, Judson, 215 *n.*

Kallen, Horace, 150 ff.

Lao Tse, 245.
Love, 138, 139, 163, 164, 175, 199, 229.

Missions, 168.

Modernism, 56.
Morality and religion, 137.
Mystic experience, 153 ff.

Organism and environment, 214 ff.

Perception:
  of God, 92 ff.
  in mystic experience, 153.
Philosophy:
  defined, 10 ff.
  limits of, 140.
  contrasted with religion, 16.
  of religion, 11.
Pound, Roscoe, 50, 239.
Perry, Ralph Barton, 160, 213 *n.*
Prayer, 73.
  and auto-suggestion, 76.
Progressivism and conservatism, 47.
Prehension, 195.

Rationalizing in religion, 35 ff.
Relativity, 191, 192.
Religion:
  and the church, 128.
  and experimental living, 63 ff.
  and love, 138, 139.
  and morality, 137.
  and value, 136 ff.
  Christian, 126.
  as conserving tradition, 144, 145.
  in formulas, 122.
  as innovating experience, 139 ff.
  as vision, 125.
  defined, 135.
  illusion in, 1, 2, 3, 149.
  in habit formation, 100.
  in psychotherapy, 120, 121.
  in schools, 24 ff.
  method of, 3 ff., 130 ff.
  personal, 28.
  philosophy of, 10 ff.
  reconstruction of, 41.

Salvation, 1, 123.
Science:
  exact sciences, 7.
  authority of, 19.
  limited value of, 18 ff.
  progress of, 45.
Sense experience in mysticism, 155.
Solitude and religion, 206.
Space-time, 191 ff.
Subsistence, realm of, 221.
Supreme good, 148 ff.
Symbolism and concepts, 223.

Theology, 11.
Transcendentalism, 221 ff.
Truth:
  and experience, 21.
  and concepts, 21 ff.
  verification of, 8, 218.
  definition of, 22, 213.

Ultimate cause, 148 ff.

Value, theory of, 160 ff.
Whitehead, A. N., 3, 181.
Williams, Donald Cary, 143, 144.
Worship, 71 ff.
Wright, Thomas H., *preface.*

GENERAL THEOLOGICAL SEMINARY
NEW YORK

BL 48 .W48 1929

Wieman, Henry Nelson, 1884-

The wrestle of religion with truth

DATE DUE

HIGHSMITH #45230

Printed in USA

GENERAL THEOLOGICAL SEMINARY
00120883